IN THE UNITED STATES DISTRIST COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

JG TECHNOLOGIES LLC,	
Plaintiff,	
,	CIVIL ACTION
v.	NO. 2:23-cv-92
THRUVISION LIMITED,	NO. 2:23-cv-92

Defendant.

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff JG Technologies LLC ("Plaintiff") files this Complaint and states as follows:

THE PARTIES

- 1. Plaintiff is a limited liability company organized and existing under the laws of the State of Alabama, having its principal office at 1592 SouthPointe Drive, Hoover, AL 35244.
- 2. Thruvision Limited ("Defendant") is a company organized under the laws of the United Kingdom having a regular and established place of business at 121 Olympic Avenue, Milton Park, Abingdon, Oxon, OX14 4SA, United Kingdom.

JURISDICTION AND VENUE

3. This Court has exclusive subject matter jurisdiction over this case pursuant to 28 U.S.C. §§ 1331 and 1338(a) on the grounds that this action arises under the Patent Laws of the United States, 35 U.S.C. § 1 et seq., including, without limitation, 35 U.S.C. §§ 271, 281, 284, and 285.

- 4. This Court has personal jurisdiction over Defendant at least because, on information and belief, Defendant has committed acts of patent infringement giving rise to this action within this State, including in connection with employee screening at Dallas/Fort Worth International Airport.
- 5. Plaintiff's cause of action arises directly from Defendant's business contacts and other activities in and/or directed toward the State of Texas.
- 6. This Court has personal jurisdiction over Defendant under the provisions of the Texas Long Arm Statute and consistent with Constitutional due process by virtue of the fact that, upon information and belief, Defendant has availed itself of the privilege of conducting and/or soliciting business within this State, including engaging in at least some of the infringing activities in this State, such that it would be reasonable for this Court to exercise jurisdiction consistent with principles underlying the U.S. Constitution and without offending traditional notions of fair play and substantial justice.
- 7. Venue is proper in this District under 28 U.S.C. § 1391(c) because Defendant is a foreign corporation.

FACTUAL BACKGROUND

8. Plaintiff is the owner by assignment of all right, title, and interest in and to United States Patent No. 7,952,511, entitled "Method and Apparatus for the Detection of Objects Using Electromagnetic Wave Attenuation Patterns" ("the '511 patent"), including the right to sue for all past, present, and future infringement, which assignment was duly recorded in the United States Patent and Trademark Office ("USPTO").

- 9. James L. Geer, the sole inventor of the '511 patent, is the sole and controlling member and owner of JG Technologies.
- 10. A true and correct copy of the '511 patent is attached hereto as Exhibit A. The '511 patent is incorporated herein by reference.
- 11. The application that became the '511 patent was filed on April 7, 2000, and was assigned U.S. Patent Application Number 09/545,407 ("the '407 Application").
- 12. The '407 Application claims priority to U.S. Provisional Application No. 60/128,233, filed April 7, 1999.
- 13. The '511 patent issued on May 31, 2011, after a full and fair examination by the United States Patent and Trademark Office.
- 14. The '511 patent is valid and enforceable and directed to eligible subject matter.

SUBJECT MATTER OF THE '511 PATENT

- 15. The '511 patent discloses and claims inventions relating to the detection of objects using electromagnetic wave attenuation patterns.
- 16. For example, the '511 patent discloses techniques for detecting enemy aircraft, particularly stealth aircraft. As the '511 patent recounts, "[r]adar was developed in World War II to detect enemy aircraft. It has subsequently been refined to detect a large variety of objects, including ships, helicopters, satellites, and land vehicles." '511 patent at 1:8-11. Such "[r]adar systems typically work on the principle of bouncing microwave radiation off an object and analyzing the reflected signal (echo)." *Id.* at 11-13.

- 17. However, "[o]nce Radar saw widespread use, military planners saw the military advantage that would accrue from having craft that are invisible to Radar. After decades of research and development, the United States began deployment of so called stealth aircraft in the 1980's," technology that could be and in some cases by that point had already been applied to other objects, such as ships, satellites, and land vehicles. *Id.* at 1:33-37. As the '511 patent describes, various techniques are used, often in combination, to absorb, scatter, or diffuse electromagnetic radiation. *Id.* at 1:1-64.
- 18. By the time the '407 application was filed, the United States no longer had a monopoly on stealth craft. Stealth technology had been deployed by several countries and was expected to become available to even more countries, including some hostile to the United States. *Id.* at 1:65-2:4. Thus, the inventor of the '511 patent recognized that "it is becoming increasing[ly] important for any military to be able to detect stealth craft." *Id.* at 2:5-6.
- 19. The '511 patent addresses technological deficiencies in existing object-detection systems, thereby providing improved techniques for detecting various objects. *Id.* at 2:25-35.
- 20. For example, the '511 patent states that its solution differed from security-system technologies such as beam-interruption sensors. *Id.* at 2:43-45. Unlike those technologies, the '511 patent "does not seek to provide a narrow beam that is fully blocked by the object to be detected." Rather, the '511 patent discloses embodiments "provid[ing] a region of detection significantly larger than a 'line of sight." *Id.* at 49-51.

- 21. Thus, unlike traditional systems in which "off axis sensitivity is extremely limited by design," the '511 patent discloses embodiments in which "a large volume of space may be monitored by a detector node . . . in contrast to known shadow detectors." *Id.* at 2:51-57.
- 22. In this way, the design principles of stealth aircraft, such as seeking to absorb microwave radiation, actually increase contrast between the craft and the background, thereby increasing visibility when technological solutions disclosed and claimed in the '511 patent are employed. *Id.* at 2:36-41.
- 23. The '511 patent also recognizes the need to not only detect an object but to recognize it. Thus, the '511 patent discloses technological solutions to this problem as well. For example, the '511 patent discloses providing "a computer reference file for the aircraft dimensions of the particular Stealth Craft suspected of detection." *Id.* at 8:53-54. The '511 patent also discloses using other characteristics, such as maximum velocity or radar signature characteristics to resolve ambiguities regarding the object suspected of detection. *Id.* at 8:54-55.
- 24. The claims of the '511 patent address technological deficiencies of the prior art such as those described above by reciting technical solutions to technical problems. For example, claim 16 of the '511 patent recites:
 - 16. A method for detecting an object, comprising the steps of:

defining expected characteristics of diffuse source electromagnetic background radiation to be received at a receiver;

attenuating at least a portion of diffuse source electromagnetic background radiation received at the receiver by a presence of an object; and

detecting the attenuation to indicate a presence of the object.

- 25. The invention recited in claim 16 addresses technical deficiencies in the state of the art. For example, it recites "defining expected characteristics of diffuse source electromagnetic background radiation to be received at a receiver," "attenuating at least a portion of diffuse source electromagnetic background radiation received at the receiver by a presence of an object," and "detecting the attenuation to indicate a presence of the object." This overcomes a deficiency in prior solutions that provided a narrow beam and sought to detect when the beam was fully blocked. Such technologies "were extremely limited by design" with respect to off-axis sensitivity. In contrast, claim 16 recites "attenuating at least a portion of diffuse source electromagnetic background radiation received at the receiver by a presence of an object," thereby permitting coverage of a much larger area than the cross-section of the object to be detected.
- 26. The claim elements recited in claim 16 were not well-understood, routine, or conventional when the inventor of the '511 patent filed his patent application.

THE GOVERNMENT'S DEMAND FOR EIGHT YEARS' WORTH OF SECRECY ORDERS

- 27. After Mr. Geer filed the '407 application in April 2000, the United States Air Force recommended on May 30, 2000, that Mr. Geer's application be placed under Secrecy Order.
- 28. The Air Force followed up on this recommendation on July 31, 2001, with a formal request that the United States Patent & Trademark Office issue a Secrecy Order withholding a grant of patent on Mr. Geer's application.

The Air Force represented that "the disclosure of the invention by the granting of a patent therefor would be detrimental to the national security."

- 29. The USPTO issued a Secrecy Order the next day, August 1, 2001.
- 30. Fifteen days later, the USPTO issued a Notice of Allowability indicating that Mr. Geer's application was in condition for allowance but for the Secrecy Order.
- 31. The Air Force annually renewed its request for the Secrecy Order eight times, from 2002 through 2009.
- 32. In January 2008, Mr. Geer petitioned for the Secrecy Order to be rescinded, citing the hindrance it caused to his intended company for commercializing the claimed technology, Anti-Stealth, LLC.
- 33. The Air Force asked that the petition be denied on August 1, 2008, and the USPTO honored that request, renewing the Secrecy Order on August 29, 2008.
- 34. The Air Force again requested that the Secrecy Order be renewed on August 13, 2009 (which the USPTO granted), before finally recommending that the Secrecy Order be rescinded on December 12, 2009.
- 35. Mr. Geer's patent finally issued on May 31, 2011, nearly ten years after the USPTO issued a Notice of Allowability for the '407 application.

PLAINTIFF'S LITIGATION AGAINST THE U.S. GOVERNMENT

36. Plaintiff brought suit against the U.S. Government relating to its use of the '511 patent on April 17, 2020, in *JG Technologies LLC v. The United States*, No. 20-455 C, in the United States Court of Federal Claims. Among

Plaintiff's claims were that the United States used the '511 patent in connection with technology provided by Thruvision.

- 37. On June 16, 2020, the United States filed an unopposed motion asking the Court to issue a notice to Thruvision Inc. to appear, if it so desired, as a party and assert whatever interest it might have in the action. Dkt. 8. The motion noted that "[t]he Complaint appears to allege that the United States has infringed claim 16 of the '511 Patent by procuring and/or using passive millimeter wave detection and passive terahertz detection equipment. . . JGT's preliminary claim chart for this infringement theory relies on, *inter alia*, references discussing alleged government procurements and testing of Thruvision equipment." *Id.* at 1-2. The Court granted this motion on June 17, 2020.
- 38. On July 21, 2020, the U.S. Government filed a return of service of notice to Thruvision indicating that a copy of the notice was served on Thruvision on July 10, 2020. Dkt. 16.
- 39. On October 29, 2021, the Court dismissed certain of Plaintiff's claims on statute-of-limitations grounds or because Plaintiff was unable to plead sufficient facts regarding the Government's secret use based on publicly available information. However, the Court denied the U.S. Government's motion to dismiss as it related to the U.S. Government's use of the '511 patent in connection with technology provided by Thruvision. Dkt. 28.
- 40. On October 4, 2022, the U.S. Government stipulated to entry of final judgment against the Government in favor of Plaintiff. Dkt. 38. Thruvision declined the Government's invitation to participate in the lawsuit and to negotiate

for a license that would extend to its activities beyond those at issue in Plaintiff's case against the U.S. Government.

COUNT I – INFRINGEMENT OF THE '511 PATENT

- 41. Plaintiff realleges and incorporates by reference the allegations set forth above, as if set forth verbatim herein.
- 42. **Direct Infringement**. Defendant has been and continues to directly infringe one or more claims of the '511 patent by making, using, offering to sell, selling and/or importing, without limitation, at least the Defendant products identified in the chart incorporated into this Count below (among the "Exemplary Defendant Products") that infringe at least the exemplary claim of the '511 patent (the "Exemplary '511 Patent Claim") identified in the chart incorporated into this Count as Exhibit B literally or by the doctrine of equivalents.
- 43. **Actual Knowledge of Infringement**. On information and belief, Defendant had notice of the '511 patent and its infringement thereof at least as early as July 10, 2020, when the U.S. Government served notice on Thruvision of Plaintiff's allegation that the Government used the '511 patent in connection with technology provided by Thruvision.
- 44. Furthermore, Plaintiff provided notice to Defendant of its infringement by letter dated February 18, 2023, which included a claim chart detailing Defendant's infringement of the '511 patent. This letter was received by Defendant prior to the filing of this lawsuit.
- 45. Therefore, Defendant has had actual knowledge of infringement as alleged herein prior to the filing of this Complaint.

- 46. Despite such actual knowledge, on information and belief,
 Defendant continues to provide at least the Defendant products identified in the
 claim chart incorporated into this Count below (among the Exemplary Defendant
 Products) and distribute product literature and website materials inducing others
 to use its products in the customary and intended manner that infringes the '511
 patent.
- 47. **Induced Infringement.** At least since receiving notice of the '511 patent and corresponding claim chart, on information and belief, Defendant has actively, knowingly, and intentionally continued to induce infringement of the '511 patent, literally or by the doctrine of equivalents, by providing Exemplary Defendant Products to its customers and distributing product literature and website materials inducing end users and others to use its products in a manner that infringes one or more claims of the '511 patent as set forth in Exhibit B, which includes a chart comparing an exemplary '511 patent claim (claim 16) to the Exemplary Defendant Products.
- 48. Plaintiff therefore incorporates by reference in its allegations herein the claim chart of Exhibit B.
- 49. Because Defendant, on information and belief, has continued its infringing conduct despite knowledge of its infringement, its infringement has been willful.
- 50. Plaintiff is entitled to recover damages adequate to compensate for Defendant's infringement.

PRAYER FOR RELIEF

Plaintiff respectfully requests that the Court find in its favor and against Defendant, and that the Court grant Plaintiff the following relief:

- a) A judgment that Defendant has infringed one or more claims of the '511 patent, and that this infringement has been willful;
- b) Damages in an amount to be determined at trial for Defendant's infringement, which amount cannot be less than a reasonable royalty;
- c) Entry of judgment that this case is exceptional within the meaning of 35 U.S.C. § 285 and that Plaintiff be awarded its reasonable attorneys' fees against Defendant that it incurs in prosecuting this action;
- d) Pre-judgment and post-judgment interest on the damages assessed;
- e) that Plaintiff be awarded costs, and expenses that it incurs in prosecuting this action; and
- f) that Plaintiff be awarded such further relief at law or in equity as the Court deems just and proper.

This 7th day of March, 2023.

/s/ Cortney S. Alexander

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