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The Patent That Disappeared

"The most common way people give up their power is by thinking they don't have any."
—Alice Walker

PART I: THE SPARK

It began with a spark of ingenuity in a small workshop in La Jolla, where Serbian-American engineer Budimir Damjanović and his wife, Desanka, sketched out a simple yet revolutionary idea: a system that could spray a specialized fluid from an aircraft's tail, blinding the infrared seekers of incoming heat-seeking missiles.

In the summer of 2007, amid rising fears of terrorist attacks on aviation—particularly shoulder-fired threats against commercial planes—they filed U.S. Patent Application No. 11/881,492 with the U.S. Patent and Trademark Office, paying fees, drafting claims, and dreaming of commercialization.¹

Budimir's invention offered an elegant independence from existing countermeasures. Unlike flares or lasers, which relied on timing, weather, or altitude, his design used a high-pressure spray of non-freezing liquid to coat and distort the missile's plastic dome seeker head, mechanically disrupting its infrared guidance system with remarkable reliability. The Damjanovićs envisioned it protecting both military jets and commercial aircraft.²

Investors hovered. Foreign patent filings beckoned. For a moment, it felt like the American Dream: invent, protect, prosper.

But whispers of scrutiny began. Under 35 U.S.C. § 181, the USPTO routinely screens patent applications for national security risks, referring sensitive ones to defense agencies like the Air Force. The Damjanovićs' invention, with its dual-use potential for military aircraft protection, caught the eye.³

No fanfare. No hearing. Just a flag—quiet, internal, and decisive.

PART II: THE ORDER

On January 22, 2009 — less than two years after filing — the USPTO issued a final order.

No hearing. No opportunity to speak. No explanation. Just this: the patent was gone. Overnight, the Damnjanovićs' world fractured. Years of work froze. Investors fled. The application vanished from public records, sealed under the Invention Secrecy Act. Penalties for Under 35 U.S.C. § 183, this triggered their statutory right to seek compensation from the government for the suppression. They submitted their administrative claim to the Air Force in June or July 2012, hoping at last for redress.⁶

The Air Force denied it.

Then, in November 2013 — now six years after filing, four years into the secrecy order — the Air Force renewed the gag for another year. The nightmare extended.⁷

Meanwhile, the world of missile defense raced on without them. Infrared countermeasures migrated toward AI-guided systems and swarm-resistant algorithms. A thermal-spray countermeasure that was cutting-edge in 2007 was becoming dated.

The Damnjanovićs were watching their invention age into obsolescence while the government held it hostage.

THE EIGHT-YEAR SILENCE DAMNJANOVIĆ PATENT TIMELINE

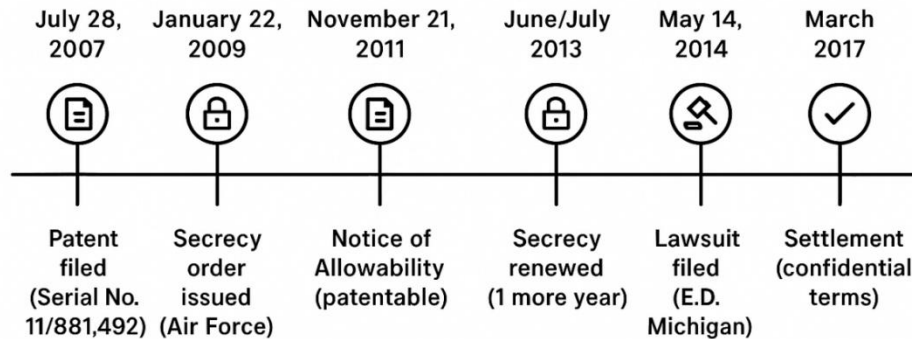


Figure 1.1. Eight Years of Silence: Damnjanović Patent Timeline (2007–2017).

Source: United States Patent and Trademark Office records and federal court filings.

Note: Timeline synthesized from public patent prosecution history, secrecy order renewals, and litigation milestones.

PART III: THE TRAP

By June 2012, when the Damnjanoviés submitted their administrative claim, they faced a problem that would define their legal odyssey: the system's fundamental paradox.

To claim compensation under 35 U.S.C. § 183, they had to prove the government had either benefited from their invention or that suppression caused quantifiable economic harm. But to prove harm—lost licensing deals, missed markets, investor interest—they would normally demonstrate the invention to prospective licensees, foreign patent offices, and potential partners.

The secrecy order prohibited exactly that.

Describing the invention to anyone, even to prove its value, meant violating the gag order itself—risking criminal penalty.

This wasn't a loophole. It was architecture.

Hattem A. Beydoun, Esq., a litigator who has represented inventors in secrecy disputes, calls this "a procedural Catch-22." The government never implemented regulations for how inventors could prove damages, so "you're essentially asking the same bureaucracy that silenced you to now pay you." He explains the evidentiary trap: "To prove economic loss, you'd normally demonstrate potential commercial value or market interest. But the secrecy

order prohibits you from showing the invention to anyone, even prospective licensees or foreign patent offices. It's a bureaucratic contradiction: prove your damages, but you're forbidden from gathering the evidence needed to do so."⁸

The Damnjanovićs' complaint, filed on May 14, 2014, in the U.S. District Court for the Eastern District of Michigan (Case No. 4:14-cv-11920), laid bare this trap. According to the court document, they alleged that "the Secrecy Orders have prevented Plaintiffs from commercializing the Invention, while the Government may have benefited from its use or suppression without payment." They demanded "just compensation under 35 U.S.C. § 183 for damages including lost profits, business opportunities, and any governmental use."⁹

More damningly, the complaint asserted that the Departments of the Air Force and Defense had failed to implement any rules under 35 U.S.C. § 183 for how an inventor should prove damages.¹⁰

The statute existed on paper. The remedy did not exist in practice. It was a dead letter—a trap disguised as protection.

QR Code 1.1. Scan to view the full complaint filed in *Damnjanović v. United States Department of the Air Force* (E.D. Mich., May 14, 2014).



THE INVENTION SECRECY PARADOX: WHY COMPENSATION IS IMPOSSIBLE

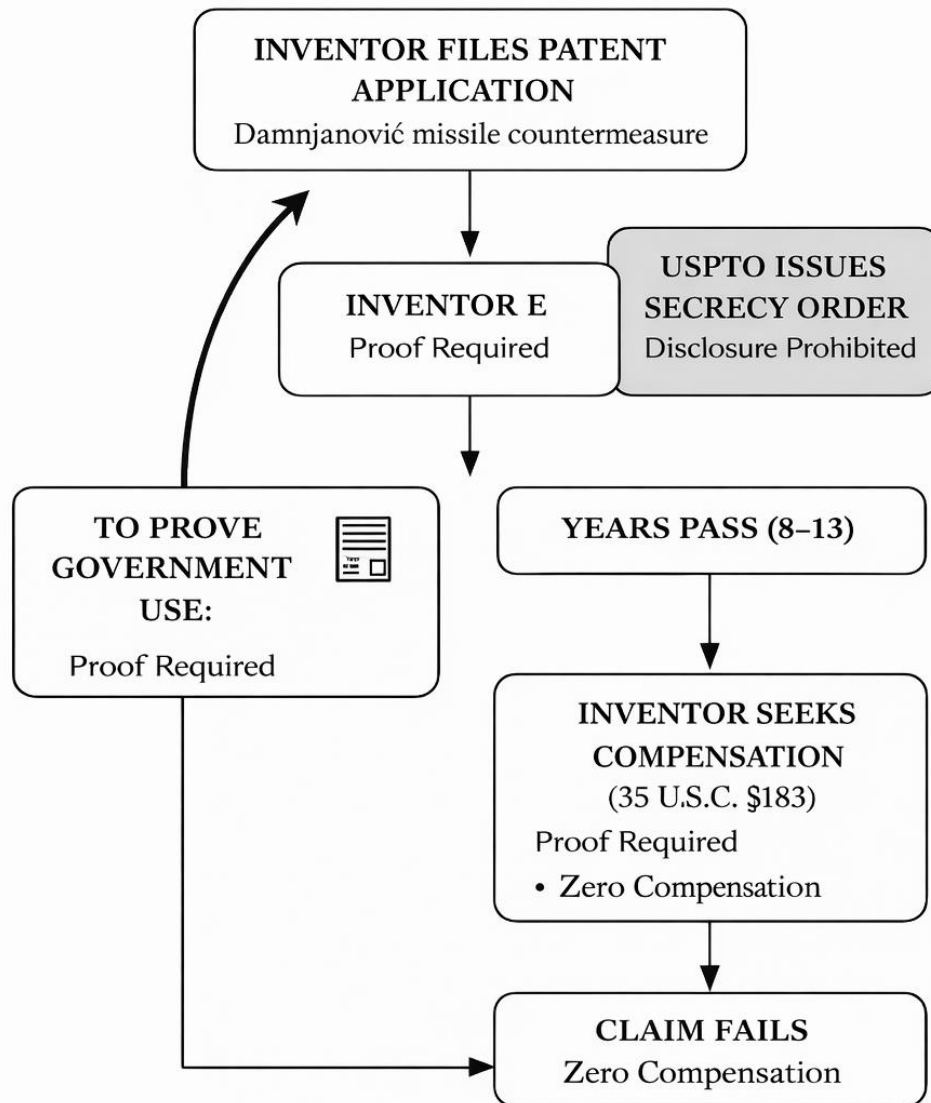


Figure 1.2. Growth in active invention secrecy orders, FY 2021–2025. Total active invention secrecy orders increased by 567 orders (9.5%) between FY 2021 and FY 2025, reaching a record high of 6,548 active orders. The data show a sustained upward trend in the number of active secrecy orders over the five-year period.

Figure 1.2. The Invention Secrecy Catch-22 under 35 U.S.C. § 183.

Source: Statutory text (35 U.S.C. §§ 181–186) and federal case law, including *Hornback v. United States* (Fed. Cir. 2010).

Note: Diagram illustrates the structural paradox requiring proof of damages while prohibiting disclosure necessary to establish such proof.

PART IV: THE CONSTITUTIONAL CHALLENGE

The complaint went further. Beyond seeking compensation, the Damnjanoviés advanced a bold secondary claim: that the Invention Secrecy Act, as applied, was unconstitutional.¹¹ They alleged violations of the **First Amendment** — that the secrecy order was an unconstitutional gag order issued by the executive branch with virtually no judicial oversight, forbidding them from disclosing their own ideas to anyone not authorized by the government. This was prior restraint, backed by criminal penalty. It prevented them from discussing their invention with colleagues, potential collaborators, customers, or investors — a direct restriction on speech.

They alleged violations of the **Fifth Amendment**—that a patent application and its associated rights constitute property interests. When the government imposes a secrecy order, it effectively seizes control of that property. The inventors were prevented from obtaining a patent, from exploiting the invention commercially, from using it in private enterprise. Meanwhile, the government benefited by keeping the technology from competitors' hands, or by using the information itself.

Beydoun's assessment of these constitutional claims is direct:

"A secrecy order is effectively a gag order issued by the executive branch, with virtually no judicial oversight. It forbids an inventor from disclosing the subject matter of their invention to anyone not authorized by the government. That is a direct restriction on speech. This isn't voluntary confidentiality as in the case when an inventor chooses to keep trade secrets, but rather government-imposed silence backed by criminal penalty."¹²

On the Fifth Amendment dimension, he elaborates:

"The inventor is prevented from obtaining a patent, from exploiting the invention commercially, and often from even using it in private enterprise. Meanwhile, the government benefits. This deprives the inventor of the economic value of their property without just compensation and due process. There is no trial, no independent tribunal, and no opportunity for the inventor to contest the necessity of taking or negotiating compensation. The result is an executive action that both restrains speech and confiscates property without due process or judicial review."¹³

QR Code 1.2. Scan to view the full text of the Invention Secrecy Act (35 U.S.C. §§ 181–188).



PART V: THE LITIGATION

The government moved to dismiss. It argued that absent proven use of the technology, no compensation was owed.

The case moved forward — but not in a way that favored the inventors.

But something else was happening behind the scenes. The government, facing litigation and constitutional scrutiny, made a calculated move: It lifted the secrecy orders.

On January 6, 2015 — after six years of suppression — the patent finally issued as U.S. Patent No. 8,925,438 B1, declassified and public.¹⁴

QR Code 1.3. Scan to view the declassified patent *U.S. Patent No. 8,925,438 B1* (issued January 6, 2015). Victory, of sorts.



Except by then, the commercial window had slammed shut. In those lost years, missile-defense technology had evolved radically. The invention, once cutting-edge, was now a relic in a field racing toward AI-guided defenses. No licensing deals materialized. No manufacturers came knocking. The patent sat uncommercialized in the USPTO database.

Eight years from filing to public issuance.

Eight years lost.

Beydoun describes the government's tactical maneuver:

“Even reaching a courtroom doesn’t level the playing field. The government has virtually unlimited resources, and its attorneys deploy

procedural tactics to avoid a ruling on the merits. In our litigation, the government conveniently lifted the secrecy order the moment we filed suit, then argued the case was moot. It was a calculated move to evade accountability, an attempt to erase years of harm by saying ‘nothing to see here.’ The system gives inventors rights on paper, then builds a fortress around the government to ensure those rights can’t be meaningfully enforced.”¹⁵

In March 2017, the case settled — quietly, confidentially. The Damnjanovićs agreed to dismissal. No public damages announced. No precedent set. The full terms remain sealed.

Silence layered upon silence, upon silence.

PART VI: WHERE IS HE NOW?

Public records fall silent after 2016.

No interviews. No updates. Perhaps retired in California. Perhaps his health failed. Perhaps he simply gave up speaking.

The invention sits in the USPTO database—patented, declassified, but never used. A relic in a field that moved on without him.

And Budimir? The silence about him is complete.

Yet beneath that silence lies a human cost that the law cannot quantify. Hattem Beydoun speaks of it with the clarity that comes from witnessing it firsthand:

“These lone inventors spend their life savings, sacrifice relations, pour their heart and soul into an invention, only to have the government abruptly tell them to stop. You may not speak of this to anyone, under threat of law. You can’t discuss your work with colleagues, you can’t explain to friends or even investors why you’ve disappeared. The law provides for fines and imprisonment for violations of the secrecy order. The psychological toll is devastating. Not just financial ruin, but years disappear. Marriages strain. Mental health suffers. The silence itself becomes a form of erasure.”¹⁶

PART VII: THIS IS NOT UNIQUE

The Damnjanović case is not anomalous. It is symptomatic.

Consider Alton B. Hornback. In the mid-1980s, his patent application for optical systems was placed under a secrecy order by the Air Force. The underlying patent (U.S. Pat. No. 6,079,666) was not publicly issued until 2000—a suppression lasting fifteen years. Hornback sued for compensation under 35 U.S.C. § 183. The Federal Circuit rejected his claim on statutory-construction grounds, leaving him without the compensation he sought. His case demonstrated the same procedural barriers, the same constitutional questions, and the same absence of meaningful remedy.¹⁷

The Federation of American Scientists, through Steven Aftergood's meticulous data aggregation from USPTO FOIA releases, has documented the scale...**6,543 secrecy orders are in effect as of the end of Fiscal Year 2025**—a steady increase from 5,976 in FY 2021.¹⁸ The Navy, Air Force, Army, Department of Energy, and other agencies impose roughly 100–300 new orders annually.

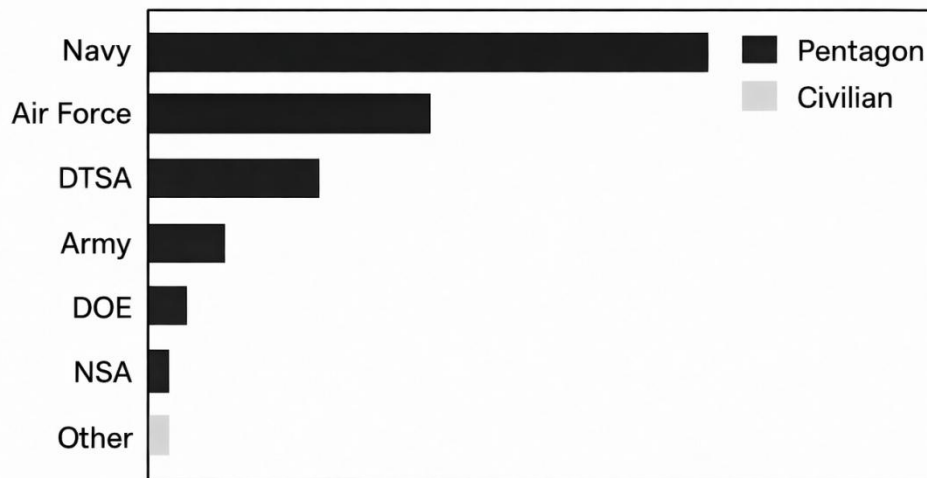
QR Code 1.4. Scan to access the Federation of American Scientists' *Invention Secrecy Activity* database (updated October 23, 2025).



In FY 2024 alone, 356 new secrecy orders were imposed—a 185% spike over FY 2023's 125 orders. The agency breakdown was: Navy (168), Air Force (113), Army (12), DOE (1), NSA (2), DTSA (46), and NASA/DARPA/Other (14). Type 1 orders (export control) and Type 3 orders dominated the landscape. The following year, FY 2025, saw a sharp decline to 102 new orders, with the Navy (63) and Air Force (24) still accounting for 85% of all impositions.

Secrecy Orders by Agency (FY 2024–2025)

356 new orders (FY24) vs. 102 (FY25)



Secrecy orders

Figure 1.3. *New Secrecy Orders by Sponsoring Agency (Fiscal Years 2024–2025).*

Source: Federation of American Scientists, “Invention Secrecy Activity.”

For comparison: Sweden maintains approximately 374 total restricted inventions (140 active; 234 inactive) under the Defence Inventions Act (1971:1078), as confirmed by Veronica Lindstrand, Swedish Patent Office, November 2025.¹⁹ This means the United States suppresses **46 times more active patents** than Sweden (6,543 vs. 140), despite both nations using similar legal mechanisms for defense patent restrictions.

“John Doe” orders on private inventors fluctuate wildly: 29 in FY 2021, then 1 in FY 2022, then 25 in FY 2023, then 0 in FY 2024, then 18 in FY 2025—suggesting policy shifts or classification changes that inventors can neither anticipate nor influence.²⁰

Growth in Active Secrecy Orders, FY 2021–FY 2025

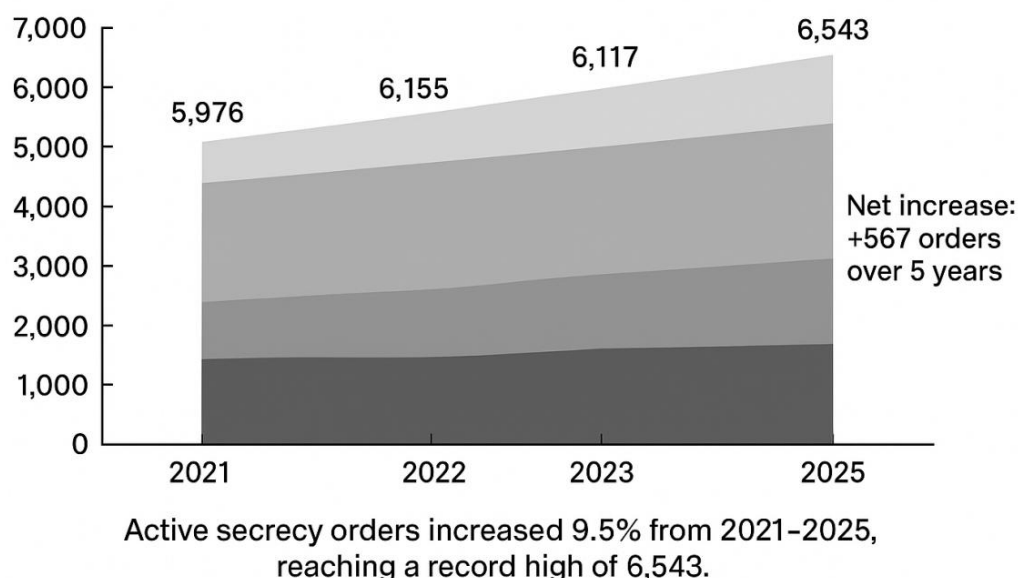


Figure 1.4. *Growth in Active Invention Secrecy Orders (Fiscal Years 2021–2025).*

Source: Federation of American Scientists, “Invention Secrecy Activity,” October 2025.

Note: Total active secrecy orders increased by 567 orders (9.5 percent), reaching a record high of 6,543.

PART VIII: THE DOUBLE DISAPPEARANCE

First disappearance: The patent was sealed, erased from public records, its potential silenced under the Invention Secrecy Act’s broad authority.

Second disappearance: The sealing records themselves were classified—interagency memos, risk assessments, and renewal justifications hidden behind FOIA exemptions for national security. The actual secrecy order forms remain inaccessible to this day, even after settlement and patent issuance. Court filings reference them but do not quote or attach them. The Air Force’s January 2009 risk assessment justifying the initial order? Exempt under 5 U.S.C. § 552(b)(1). The November 2013 renewal rationale? Likewise sealed.²⁰

This is meta-secrecy—secrecy about secrecy—and it is what allows the system to perpetuate itself. An inventor cannot learn why their invention was deemed dangerous, nor can they access the government’s reasoning behind their own silencing.

This tendency toward meta-secrecy is not uniquely American; it appears to be a structural feature of secrecy regimes more broadly. Sweden, for example—despite restricting far fewer inventions than the United States—also keeps its criteria for determining which inventions may be restricted classified. This suggests that concealing the rationale for secrecy is not an anomaly but an institutional reflex, even in nations regarded as comparatively transparent.²¹

The Damnjanovićs exist in this void—inventors without explanation, innovators without remedy, Americans denied the due process their government promises.

QR Code 1.5. Scan to view Sweden’s Defence Inventions Act (Lag 1971:1078), which mandates annual review timelines and enforceable compensation protections absent under U.S. law.



❖ THE QUESTION

Attempts to reach the Damnjanovićs for this chapter yielded no response, underscoring the lingering chill that secrecy orders cast. Their lives were interrupted. Their invention was erased. Their story was buried.

Yet in that silence, a question emerges: How many more patents will disappear twice? How many more inventors will be silenced? How many innovations will age into obsolescence while bureaucracies thrive?

These are not rhetorical questions. They demand answers. And those answers require understanding how we got here—how Cold War doctrine metastasized into peacetime bureaucracy, how a doctrine born in Vietnamese jungles became the default posture in patent offices, how an American inventor could be erased by his own government.

That story begins in the shadows of the Cold War.

It is the subject of **Chapter 2**.

❖ DISCUSSION QUESTIONS FOR READERS

- **Personal Stakes:** If you invented something valuable, how would you respond to a government order forbidding you from discussing it, without explanation or timeline? What would that silence cost you?
 - **The Catch-22:** The Damnjanovićs had to prove harm to claim damages, but proving harm required describing the invention—which was forbidden. Is there any system of justice where this paradox makes sense? How would you fix it?
 - **Temporal Cost:** The invention took 8 years to issue as a patent, during which technology evolved beyond it. Is this a "taking" under the Fifth Amendment? If so, what compensation is adequate?
 - **Government Silence:** The government never explained why the Damnjanovićs' invention was deemed a national security threat. Do citizens have a right to know? Where should the line between security and transparency be drawn?
 - **Institutional Accountability:** 6,543 secrecy orders are currently active. How many of these are justified? How would we know? What mechanisms should exist for oversight?
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❖ GLOSSARY

35 U.S.C. § 181 – Section 181 of Title 35 (Patents) of the U.S. Code. Authorizes the USPTO to issue secrecy orders on patent applications when the Secretary of a federal agency determines that disclosure "might be detrimental to the national security."

35 U.S.C. § 183 – Section 183 of Title 35. Provides limited statutory relief for inventors subject to secrecy orders, allowing them to seek compensation from the government for damages caused by suppression. Implementation regulations remain incomplete.

35 U.S.C. § 186 – Section 186 of Title 35. Establishes criminal penalties for willful violation of a secrecy order: fines up to \$10,000 or imprisonment up to 2 years, or both.

Architecture of Silence – The network of statutes, administrative rules, agency practices, and institutional reflexes that suppresses disclosure of inventions on national security grounds, often without transparency, appeal mechanisms, or adequate compensation.

Catch-22 – A logical paradox wherein one must satisfy a condition to gain a benefit, but satisfying that condition is prohibited by the rule enforcing the benefit. In this context: proving damages requires disclosure; disclosure is prohibited under penalty of law.

Declassification – The process of removing classified status from a document or invention, making it available to the public. In the Damnjanović case, the patent was declassified after settlement, but the secrecy order reasoning remained classified.

Dual-Use Technology – Technology with both civilian and military applications. The Damnjanović invention (missile countermeasure) is dual-use, applicable to both commercial and military aircraft.

FOIA Exemption 5 U.S.C. § 552(b)(1) – A provision of the Freedom of Information Act allowing the government to withhold documents classified on national security grounds.

Infrared Seeker – A sensor system in heat-seeking (infrared-guided) missiles that locks onto the infrared radiation emitted by jet engine exhaust. The Damnjanović invention disrupts these seekers using a fluid spray.

Invention Secrecy Act of 1951 – 35 U.S.C. §§ 181–188. Federal statute authorizing the USPTO to issue secrecy orders on patent applications deemed detrimental to national security, with limited remedies for inventors.

John Doe Order – A secrecy order imposed on a private inventor (as opposed to a corporate or institutional applicant), often without advance notice or explanation.

Meta-Secrecy – Secrecy about secrecy—the practice of classifying the reasons, rationales, and justifications for secrecy orders themselves, preventing inventors or the public from understanding why suppression occurred.

Notice of Allowability – A USPTO document indicating that a patent application has satisfied examination requirements and is patentable, but issuance is withheld (in this case, due to secrecy order).

Prior Restraint – A legal doctrine prohibiting the government from censoring speech before it is expressed. Secrecy orders function as prior restraint on inventors' speech about their inventions.

Secrecy Order – An administrative directive issued by the USPTO under 35 U.S.C. § 181, forbidding an inventor from publishing, disclosing, or filing a patent application abroad without government permission.

Taking (Fifth Amendment) – Refers to the government's seizure of private property without just compensation, prohibited by the Fifth Amendment. Secrecy orders may constitute an unconstitutional taking of intellectual property rights.

❖ ENDNOTES

1. U.S. Patent Application Serial No. 11/881,492 (filed July 28, 2007), later declassified and issued as U.S. Patent No. 8,925,438 B1 (January 6, 2015).
2. U.S. Patent No. 8,925,438 B1 (issued January 6, 2015), Abstract. The invention is described as “a countermeasure process for both military and civil commercial aircraft under attack by an infrared heat seeking missile,” employing a “dispersing liquid substance under high pressure in a spray form” to coat a missile’s seeker dome.
3. 35 U.S.C. § 181 (authorizing secrecy orders when disclosure “might be detrimental to the national security”).
4. 35 U.S.C. § 186 (establishing criminal penalties for willful violation of a secrecy order, including fines of up to \$10,000 or imprisonment of up to two years).
5. *Damnjanović v. U.S. Department of the Air Force*, Complaint, No. 4:14-cv-11920 (E.D. Mich. filed May 14, 2014), 5, 18.
6. *Damnjanović v. U.S. Department of the Air Force*, Complaint, No. 4:14-cv-11920 (E.D. Mich. filed May 14, 2014), 5, 19–20; see also 35 U.S.C. § 183.
7. *Damnjanović v. U.S. Department of the Air Force*, Complaint, No. 4:14-cv-11920 (E.D. Mich. filed May 14, 2014), 6, 25.
8. Hattem A. Beydoun, Esq., email interview by the author, October 20, 2025.
9. *Damnjanović v. U.S. Department of the Air Force*, Complaint, No. 4:14-cv-11920 (E.D. Mich. filed May 14, 2014), 7–8, 33–34.
10. *Damnjanović v. U.S. Department of the Air Force*, Complaint, No. 4:14-cv-11920 (E.D. Mich. filed May 14, 2014), 8, 35.
11. *Damnjanović v. U.S. Department of the Air Force*, Complaint, No. 4:14-cv-11920 (E.D. Mich. filed May 14, 2014), 8, 35–37 (alleging violations of the First and Fifth Amendments).
12. Hattem A. Beydoun, Esq., email interview by the author, October 20, 2025.
13. Hattem A. Beydoun, Esq., email interview by the author, October 20, 2025.
14. U.S. Patent No. 8,925,438 B1 (issued January 6, 2015). The eight-year delay reflects the period from July 28, 2007 (filing) to January 6, 2015 (issuance). The case later settled confidentially in March 2017. See *Damnjanović v. U.S. Department of the Air Force*, No. 4:14-cv-11920 (E.D. Mich. 2014).
15. Hattem A. Beydoun, Esq., email interview by the author, October 20, 2025.
16. Hattem A. Beydoun, Esq., email interview by the author, October 20, 2025.
17. *Hornback v. United States*, 601 F.3d 1382 (Fed. Cir. 2010) (appeal No. 09-1543), denying compensation under 35 U.S.C. § 183 on statutory-construction grounds.
18. Federation of American Scientists, “Invention Secrecy Activity,” updated October 23, 2025. FY 2025 active secrecy orders: 6,543 (up from 5,976 in FY 2021). FY 2024 new secrecy orders by agency: Navy (168), Air Force (113), Army (12), Department of Energy (1), National Security Agency (2), Defense Technology Security Administration (46), NASA/DARPA/Other (14). Total new orders in FY 2024: 356.
19. Swedish Act on Defence Inventions, Lag (1971:1078) om försvarsuppfinningar. Statistical data confirmed by Veronica Lindstrand, Patent Lawyer, Swedish Intellectual Property Office (PRV), email correspondence with the author, November 2025. As of November 6, 2025, Sweden recorded 374 total restricted inventions (140 active; 234 inactive), representing an active suppression rate approximately 97 percent lower than that of the United States (140 versus 6,543). Key safeguards include mandatory annual reviews (§ 8), strict statutory deadlines (§§ 6–7), and enforceable compensation for damages (§ 14).
20. Federation of American Scientists, “Invention Secrecy Activity,” updated October 23, 2025. “John Doe” secrecy order fluctuations: FY 2021 (29), FY 2022 (1), FY 2023 (25), FY 2024 (0), FY 2025 (18).
21. 5 U.S.C. § 552(b)(1) (Freedom of Information Act exemption for national-security-classified information).

❖ BIBLIOGRAPHY

Government Data & Legal Resources

Damnjanović v. United States Department of the Air Force. Complaint. No. 4:14-cv-11920. E.D. Mich. Filed May 14, 2014.

Full document available via QR Code 1.1.

Defence Inventions Act (1971:1078) (as amended through Act (2016:195)). Sweden.

<https://www.wipo.int/wipolex/en/legislation/details/17716>.

Hornback v. United States, 601 F.3d 1382 (Fed. Cir. 2010).

United States. Patent No. 8,925,438 B1. Issued January 6, 2015. Application Serial No. 11/881,492. Filed July 28, 2007.

United States Code. 5 U.S.C. § 552(b)(1).

United States Code. 35 U.S.C. §§ 181–188.

Interviews

Aftergood, Steven. Interview by the author, October 2025.

Beydoun, Hattem A. Email interview by the author, October 2025.

Correspondence

Lindstrand, Veronica. Patent Lawyer, Swedish Intellectual Property Office (PRV). Email correspondence with the author, November 2025.

Secondary Sources

Aftergood, Steven. “Invention Secrecy Activity.” Federation of American Scientists. Updated October 23, 2025. Accessed via QR Code 1.4.

Walker, Alice. *In Search of Our Mothers' Gardens: Womanist Prose*. San Diego: Harcourt Brace Jovanovich, 1983.