

Inventing While Black: Historical Suppression, Structural Exclusion, and a Policy Agenda for Equitable Innovation in 2026

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(Photo by Canva)

“*The innovation gap is not a reflection of diminished inventive capacity. It is the predictable outcome of structural exclusion.*”

Abstract

The United States patent system has never applied its promise equitably. From the antebellum period through the present, structural and legal barriers have denied Black Americans access to intellectual property protections. The innovation gap between Black and white Americans is not a product of differential inventive capacity. It is the predictable result of a system calibrated at every stage to exclude. Drawing on historical patent data, empirical economics research, legal scholarship, and policy analysis, this article traces the mechanisms of exclusion from their constitutional origins through their contemporary forms in biased patent prosecution, underfunded HBCU research pipelines, and the near-absence of Black intellectual property attorneys. The article concludes with six targeted policy recommendations for 2026.

Introduction

In 2025, Dr. Stacey Franklin Jones was appointed U.S. Co-Chair of NATO Science and Technology Organization Technical Team SCI-349 focused on heterogeneous

data-driven space domain decision intelligence. She holds a patent for a fast kinematic construct approach to space object detection. Her company, O Analytics Incorporated, develops algorithmic software for real-time satellite identification and hypersonic target tracking in low Earth orbit using artificial intelligence and machine learning. That patent was developed through a \$75,000 Department of Defense STTR Phase I award and a subsequent \$1.25 million Phase II award from the Department of the Air Force and United States Space Force. Across her career, Dr. Jones has contributed to more than \$50 million in federal contracts (O Analytics Incorporated 2026).

She defied every barrier stacked against her. That such defiance was required is the indictment. Black women comprise approximately 2 percent of the STEM workforce and a vanishingly small fraction of U.S. patent holders. Less than two percent of patents granted in the United States are awarded to Black inventors, and less than two percent of intellectual property attorneys are Black (Goodman and Patterson 2024; Williams, Smith, and Major-Morris 2021).

The pathway from invention to patent protection was built by and for someone else.

Pictured is the patent drawing of Henry Blair's Seed Planter (U.S. Patent No. 8447X, October 14, 1834), one of the earliest documented patents granted to a Black inventor in the United States, illustrating both the ingenuity of Black inventors and the rarity of their access to formal intellectual property protection in that era.

Thomas L. Jennings (c. 1791 to February 12, 1859) is recognized as the first African American to receive a U.S. patent, granted in 1821 for a dry-cleaning method. Jennings used the resulting fortune to fund the abolitionist movement, demonstrating that patent protection is not only a commercial instrument but a mechanism for community-level wealth and resistance (Williams, Smith, and Major-Morris 2021).

Foundational Concepts

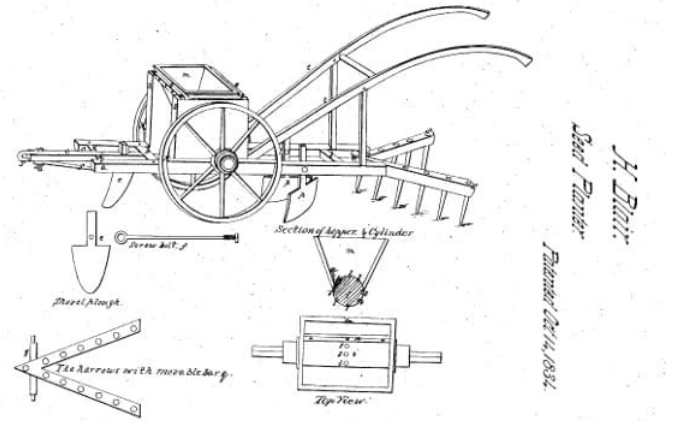
A patent is a federal grant giving an inventor the legally enforceable right to exclude others from making, using, selling, or importing a claimed invention for twenty years from the filing date (Kass 2025). In exchange, the inventor publicly discloses the invention in sufficient detail for a skilled person to reproduce it. Patents are powerful wealth-building instruments: a holder can license, sell, or use a patent to exclude competitors. Across American history, patents have been a primary pathway from invention to commercial wealth (Rothwell and Perry 2020; Kass 2025).

Patent prosecution begins with filing an application at the United States Patent and Trademark Office, which is then examined for novelty, nonobviousness, and adequate description. The standard of review turns on the "person having ordinary skill in the art," a legal fiction meant to ensure objectivity. As this article shows, that standard is not objective. It is constructed and interpreted by humans who carry cultural assumptions into every evaluation (Goodman and Patterson 2024).

A System Built for Exclusion

The Patent and Copyright Clause, Article I, Section 8, Clause 8 of the U.S. Constitution, grants Congress power to promote the progress of science and useful arts by securing to inventors the exclusive right to their discoveries. The language is inclusive. The implementation was not.

Before the Civil War, enslaved people could not take the patent oath or hold patent rights. The Confederate Patent Act explicitly authorized slaveholders to patent inventions



Patent drawing of H. Blair's Seed Planter, U.S. Patent No. 8447X, patented October 14, 1834.

produced by enslaved people, transferring intellectual property rights from creators to owners. Jefferson Davis himself reportedly sought to patent a propeller invented by an enslaved man. Even free Black Americans faced patent examiners and attorneys who were openly hostile, and a Patent Office fire in 1836 destroyed many early Black-owned patents before they could be documented (Williams, Smith, and Major-Morris 2021; Kass 2025).

Between the end of the Civil War and the early twentieth century, Black invention surged. Researchers at the Brookings Institution, linking patent records from 1870 to 1940 to full census demographic records, found that Black Americans in northern states filed patents at a rate of 0.31 per 1,000 residents, exceeding most national rates observed anywhere in the world today. In New York, Michigan, Ohio, Pennsylvania, and Indiana, Black patenting rates equaled or exceeded white patenting rates. Black Americans were 1.6 percent of the northern population and accounted for 1.6 percent of northern patents, a parity never recovered (Rothwell and Perry 2020).

The cut-off was not an accident. Economist Lisa D. Cook reconstructed what happened using an original database of Black inventors drawn from patent records, professional directories, and historical newspaper obituaries. Black patenting per capita peaked in 1899. The 1896 Supreme Court decision in *Plessy v. Ferguson* then legitimized segregation laws that closed Black inventors' access to public libraries, severed professional relationships with white attorneys who held a functional monopoly on patent practice, and ended the informal networks through which inventors collaborated.

Black patent rates declined sharply after 1899 and did not recover to that per capita peak until 2010 (Moore 2020; Rothwell and Perry 2020).

The Tulsa Massacre of 1921 produced a second, statistically identifiable decline. Cook's analysis shows a measurable drop in patent applications by African Americans nationwide following the destruction of the Greenwood district of Tulsa, one of the wealthiest Black communities in the country. The mechanism was psychological as much as material: the massacre communicated that the state would not protect Black inventors and that the investment required to develop a patent could be destroyed by mob violence at any time. Cook estimated that in the absence of violence and segregation, Black inventors should have produced approximately 1,100 patents annually at the period's peak. The actual number was 726 (Moore 2020).

The Machine Still Runs

The structural exclusion of Black inventors did not end with the abolition of Jim Crow. The mechanisms changed. The outcomes did not.

Goodman and Patterson (2024) identify the patent prosecution process itself as a system that systematically disadvantages inventors whose inventions are rooted in minority-group cultural knowledge. At the application writing stage, practitioners bring cultural capital shaped by their education and lived experience. When a practitioner's cultural capital does not overlap with the cultural knowledge from which an invention derives, the resulting application is weaker than it should be.

Goodman and Patterson trace this through the prosecution history of Black inventors Brigitte Gopou and Bruce Boyd, creators of the NuDred, a hair-sculpting device designed to twist tightly coiled hair. Their attorney substituted the word "clumps" for "twists" throughout the application, reflecting his own speech community rather than the inventors' terminology. The USPTO classified the application partly as sanitary equipment rather than as a hair-treatment device. The examiner then rejected the claims by comparing the NuDred to bath sponges and an antiperspirant applicator. As Gopou later stated: "The examiner did not see it in the same way. He put deodorant in the same category. How can that work on hair? It is not fair" (Goodman and Patterson 2024, 130). The inventors received no patent protection for the device itself, only for the method of using it, severely limiting their ability to assert infringement against competitors.

The practitioner community that serves as gatekeeper to

patent protection is overwhelmingly white. Fewer than 1.8 percent of IP attorneys in the United States are Black, 2.5 percent are Hispanic or Latino, and less than 0.5 percent are Native American. Seventy percent are male (Williams, Smith, and Major-Morris 2021). Pro bono selection is similarly distorted: practitioners evaluating whether to take on a pro bono case use their own assessment of an invention's commercial potential, an assessment shaped by whether they can envision the product's market. An invention rooted in a cultural space the practitioner has no experience with is simply harder for them to evaluate as commercially promising, regardless of its objective merits (Goodman and Patterson 2024).

The Pipeline Problem

HBCUs educate approximately 9 percent of all Black students in higher education and produce nearly 20 percent of the STEM degrees earned by Black graduates. Seventy-six percent of HBCU undergraduates receive Pell Grants, compared with approximately 31 percent at all institutions (Garrett 2025). These institutions are, by measurable output, the most efficient producers of Black STEM talent in the United States.

Their research output does not reflect their capacity. All HBCUs combined have been granted approximately 400 patents to date. The University of California system alone has issued more than 12,700. In fiscal year 2023, HBCUs received 0.91 percent of approximately \$60 Billion in federal research and development expenditures at colleges and universities, while constituting 3.2 percent of four-year degree-granting institutions. The Department of Health and Human Services, controlling 55.5 percent of federal university R&D funding, allocated 0.54 percent to HBCUs. The Department of Defense, controlling 15.2 percent, allocated 0.40 percent (Partridge, Santos, and Sheppard 2025).

The current policy environment has made this worse. Executive orders targeting diversity, equity, and inclusion programs have resulted in grant cancellations, funding freezes, and regulatory uncertainty for programs supporting HBCU research capacity. The proposed FY 2026 federal budget includes a 57 percent cut to the National Science Foundation, a 40 percent cut to the Nations Health Institutions, and a 47 percent cut to NASA's science budget, the primary federal R&D pipeline for HBCU researchers (Partridge, Santos, and Sheppard 2025).

Morgan State University demonstrates that the cycle of underfunding is not inevitable when investment is intentional. Between 2018 and 2024, Morgan State tripled its research funding from \$33 million to \$88.5 million and in 2023 secured 13 patents, a record for any HBCU in a single year, including patents for a cybersecurity tool, a stormwater management system, and a skin cancer detection imaging system (Garrett 2025).

The Compounding Cost

Contemporary research confirms that diverse inventor teams produce stronger and more commercially successful patents, and that the exclusion of underrepresented groups from the innovation system is an economic loss as well as a justice failure (Inventiv.org 2026). Black American inventors account for approximately six patents per million people, compared with approximately 235 per million for white Americans (Inventiv.org 2026).

The racial wealth gap provides broader context. Research presented at the MIT Stone Center on Inequality in April 2026 documents that the wealth ratio between Black and white Americans stands at 6:1, meaning the average Black American holds approximately seventeen cents for every dollar of wealth held by the average white American, and that this ratio has remained essentially unchanged for fifty years. The stolen patents, suppressed licensing revenue, companies never capitalized, and generational wealth never transferred form a material component of that gap (Kass 2025).

A 2026 Policy Agenda

The following six recommendations address the mechanisms of exclusion rather than their symptoms.

I. Mandate Cultural Competency Training at the USPTO

The USPTO has no current requirement for cultural competency training for practitioners or examiners. The agency should engage cultural anthropologists and sociologists to audit the art unit classification system for structural biases, develop examiner training curricula addressing how cultural capital assumptions infiltrate determinations of novelty and obviousness, and create mandatory intake disclosure requirements for practitioners to assess and document the cultural-capital gap at the outset of representation. The American Bar Association's Model Rules of Professional Conduct should be amended to make explicit that substandard representation resulting from a practitioner's failure to bridge cultural-capital gaps constitutes professional misconduct under Rule 8.4(g) (Goodman and Patterson 2024).

II. Establish Binding Federal R&D Parity Benchmarks for HBCUs

Every president since Jimmy Carter has issued an executive order encouraging federal agencies to increase HBCU participation in federal programs. None of those orders has contained binding numerical targets with accountability mechanisms (Partridge, Santos, and Sheppard 2025). Congress should pass legislation requiring that HBCUs receive 3.2 percent of total federal university R&D funding, corresponding to their share of four-year degree-granting institutions, by 2030, with specific benchmarks for the Departments of Health and Human Services and Defense.

Create a Dedicated HBCU Patent and Research Endowment Fund

Congress should establish an interest-bearing endowment fund for HBCUs, modeled on the Tribal College Endowment Fund created by the Equity in Educational Land-Grant Status Act of 1994, distributing interest annually to HBCUs for investment in technology transfer offices, patent prosecution legal support, laboratory infrastructure, and research faculty hiring. A portion of royalty and licensing revenues generated by patents developed through federally funded university research under the Bayh-Dole Act of 1980 should be redirected to this fund (Partridge, Santos, and Sheppard 2025).

Build a USPTO Searchable Database of Cultural Subject Matter Expertise

Currently, inventors seeking a practitioner with experience in their specific area of invention have no tool to identify practitioners with competency in inventions rooted in specific cultural communities or lived experiences. The USPTO should develop a publicly searchable function allowing inventors to identify practitioners with documented experience in minority-group cultural spaces, organized by self-disclosure or by allowance rates in relevant classification categories. This reform requires no new legislation (Goodman and Patterson 2024).

Audit and Reform Pro Bono Patent Program Selection Processes

The USPTO's pro bono program should be reformed to require practitioners to disclose relevant cultural subject matter expertise beyond technical categories, to

collect and report demographic data on inventors served, and to audit selection outcomes annually for racial and cultural disparities. Funding for pro bono patent clinics at HBCUs and law schools serving underrepresented inventors, such as the clinic at Howard University School of Law that recently secured its first patent, should be treated as a public investment in access to justice (Williams, Smith, and Major-Morris 2021; Institute for Intellectual Property and Social Justice 2026).

VI. Build Structured Pipelines for Black IP Attorneys

Less than two percent of IP attorneys are Black, and that figure has not changed meaningfully in a generation despite stated commitments from bar associations, law firms, and the USPTO (Williams, Smith, and Major-Morris 2021; Goodman and Patterson 2024). Law schools should incorporate cultural humility training into patent prosecution coursework. Bar associations should create accountable mentorship pipelines between senior Black IP practitioners and current law students, publish annual progress reports on representation, and set numerical targets rather than aspirational commitments. IP firms should measure and report retention rates of Black attorneys alongside hiring rates, because the data consistently shows the pipeline problem is as much about retention as recruitment (Williams, Smith, and Major-Morris 2021).

Conclusion

Dr. Stacey Franklin Jones did not wait for the system to be fixed before she built something that did not previously exist. She secured her patent, built her company, leads a NATO technical team, and invented a method for detecting space objects that the Department of Defense paid \$1.25 million to develop further. None of that happened because the system made it easy. It happened in spite of the system. The Brookings data shows that when Black Americans had access to education, legal systems they could trust, and professional networks that did not exclude them, they invented at among the highest rates ever recorded anywhere in the world (Rothwell and Perry 2020). The Cook data shows what happened when that access was taken away: a century-long suppression of Black patenting that did not recover its 1899 per capita peak until 2010 (Moore 2020). The Goodman and Patterson case studies show that the taking continues, more quietly, in the rooms where patent applications are written and reviewed (Goodman and Patterson 2024).

The HBCU funding data shows that the institutions best positioned to close the pipeline gap are the ones most deliberately starved of the resources to do so (Partridge, Santos, and Sheppard 2025; Garrett 2025).

The question before policymakers, attorneys, educators, and administrators in 2026 is not whether Black Americans can invent. That question was settled more than a century ago. The question is whether the institutions that govern access to intellectual property protection are willing to acknowledge what the historical and empirical record shows, and to act on it with the specificity and accountability the evidence demands.

Every president since Jimmy Carter has issued an executive order encouraging federal agencies to increase HBCU participation in federal programs. None of those orders has contained binding numerical targets with accountability mechanisms (Partridge, Santos, and Sheppard 2025). Congress should pass legislation requiring that HBCUs receive 3.2 percent of total federal university R&D funding, corresponding to their share of four-year degree-granting institutions, by 2030, with specific benchmarks for the Departments of Health and Human Services and Defense.