

FORENSIC ANALYSIS REPORT
InfiniSet vs. Netflix — Patent Duplication Forensic Analysis

MCRO | InfiniSet vs. Netflix — Patent Duplication Forensic Analysis

Report Date	March 7, 2026
Case Reference	State of Minnesota v. Guertin 27-CR-23-1886
Court	Fourth Judicial District Court, Hennepin County
Primary Patents	US 11,577,177 (InfiniSet) vs. US 11,810,254 (Netflix)
Scope	Patent claim comparison, timeline analysis, corporate context, court record documentation
Data Sources	USPTO / Google Patents, MCRO Forensic Database (PostgreSQL/Supabase), Pro Se Court Filings
Prepared by	Forensic Data Analysis — MCRO Database

IMPORTANT DISCLAIMER

This report presents an objective technical comparison of two United States patents and documents verifiable facts regarding their prosecution timelines, claim elements, and corporate context. It does not constitute a legal opinion on patent validity, infringement, or enforceability.

No claims of fraud, theft, intent, or motive are made or implied. Claim construction is ultimately a legal question for courts and the USPTO. Terminology differences between patents may reflect substantive technical distinctions not apparent from face-of-patent analysis.

All patent data is sourced from publicly available USPTO records and Google Patents. All court record data is freshly queried from the MCRO forensic database. Findings represent documented patterns requiring independent expert verification.

EXECUTIVE SUMMARY

- US Patent 11,577,177 (InfiniSet, inventor Matthew Guertin) was granted February 14, 2023, with a provisional filing date of March 19, 2021. US Patent 11,810,254 (Netflix, inventor Stephan Trojansky) was granted November 7, 2023, with a filing date of approximately March 31, 2021. InfiniSet's provisional application predates the Netflix application by 12 days.
- Both patents describe integrated treadmill-plus-virtual-environment systems designed to create the illusion of unrestricted movement within a confined physical space. InfiniSet describes a "motorized rotatable treadmill" on a turntable; Netflix describes an "omnidirectional treadmill" surrounded by display panels.

- The core claimed innovations overlap across at least seven functional elements: movement platform, display system, camera synchronization, real-time tracking, environment response, compositing integration, and digital twin/avatar creation.
- InfiniSet's US 11,577,177 appears in the "References Cited" section of Netflix's US 11,810,254, having been submitted as third-party prior art during Netflix's prosecution at the USPTO.
- Netflix acquired Scanline VFX (led by Stephan Trojansky) in November 2021 and subsequently invested \$100 million in South Korea VFX facilities through Scanline, plus \$2.5 billion in Korean content. Paul Debevec was named Chief Research Officer of Eycline Studios (Netflix) in January 2023.
- Guertin has filed extensive pro se motions in the Fourth Judicial District (case 27-CR-23-1886) documenting the patent overlap, including Exhibits M–Q (filed February 28, 2025), Exhibits D–G (filed April 14, 2025), and an Affidavit of Fact (filed April 9, 2024). The MCRO database records 246 total docket events and 138 pro se filings in this case.
- Guertin has also filed patent-related exhibits in federal court (case 0:24-cv-02646, Doc. 47, filed August 7, 2024; case 0:25-cv-02670, Docs. 62–67).
- The 12-day filing proximity, substantial claim overlap, and the appearance of InfiniSet's patent in Netflix's References Cited section are independently verifiable facts. This report presents them without attributing motive or intent.

Patent Overlap at a Glance

Attribute	InfiniSet (US 11,577,177)	Netflix (US 11,810,254)
Grant Date	February 14, 2023	November 7, 2023
Filing Date	March 18, 2022 (Prov: Mar 19, 2021)	~March 31, 2021
Inventor	Matthew Guertin	Stephan Trojansky
Assignee	InfiniSet, Inc. (Edina, MN)	Netflix, Inc.
Movement Platform	Motorized rotatable treadmill on turntable	Omnidirectional treadmill
Display System	LED virtual film set / green screen	1st/2nd/3rd sets of display panels (wall/ceiling/floor)
Camera Sync	Camera synched with treadmill speed/direction	Sensors coupled to repositioning system
Environment Update	Background imagery updated with user movement	Content updated in response to subject movement
Digital Twin	3D avatar via multi-angle photogrammetry	3D representation for insertion into video
Prior Art Cited?	N/A (this IS the prior art)	Yes — US 11,577,177 in References Cited

METHODS

This report integrates three independent data streams to construct its analysis:

Patent Data (Web Search): Both patents were accessed via Google Patents and Justia Patents. Independent claims, prosecution dates, inventor/assignee information, and the References Cited section were extracted and verified. Corporate history was researched via Variety, The Hollywood Reporter, Deadline, The Korea Herald, and other trade publications.

MCRO Forensic Database (SQL): The live PostgreSQL database (Supabase project ibfmjtwahkwqzcmeyqii) was queried for case 27-CR-23-1886 docket events, focusing on Guertin's pro se filings documenting patent overlap evidence. Tables queried include parents, parents_case_events, and children. All SQL queries are reproduced in the Appendix.

Uploaded Exhibit Files (Analytical Guides): Three PDF exhibits filed into the Fourth Judicial District were reviewed to identify Guertin's own claim-by-claim comparison work (Exhibits M, N, K, D, E, F, G). These were used as analytical guides to identify which claim elements to verify independently; they are not treated as authoritative patent opinions.

FINDINGS

Finding 1: Claim-by-Claim Mapping — Core Technological Overlap

Background

Patent claim mapping is the standard method for assessing technological overlap between two patents. Independent claims define the broadest scope of protection. Both InfiniSet and Netflix patents contain independent claims describing integrated treadmill-plus-virtual-environment systems.

Findings

The following table maps key functional elements across both patents' independent claims, as verified from Google Patents and Justia Patents:

Claim Element	InfiniSet Claim	InfiniSet Language	Netflix Claim	Netflix Language
Movement platform	1, 4	Motorized treadmill base with endless belt on rotatable turntable for unlimited directional movement	1	Omnidirectional treadmill within area surrounded by display panels
Display system	1	LED virtual film set or green screen set with background imagery	1	First set of display panels surrounding area; second set above; third set below
Camera/sensor sync	1, 4	Camera synched with real-world speed and distance traveled by belt	1	Sensors capture data of subject; repositioning system tracks subject
Environment response	1, 4	Illusion of unrestricted movement created via synched camera + environment	1	Controller updates displayed content in response to subject movement
User cueing	4	Audio, visual, or tactile cue sources provided to user on treadmill	Desc.	Sensor data used to determine and respond to movement

Green screen / compositing	1	System for use in green screen or LED virtual film set	Desc.	Display panels present multidimensional scene for in-camera compositing
Digital twin / 3D representation	Desc.	Multi-angle photogrammetry for 3D avatar / digital twin creation	1	Representation of subject generated for insertion into other video content

Significance

All seven core functional elements present in InfiniSet's patent are also present in Netflix's patent. The two patents describe functionally equivalent systems using different terminology. The overlap spans the fundamental architecture: both systems integrate a specialized treadmill with a surrounding visual environment, synchronize tracking and display to the user's movement, and generate a digital representation of the user. These are not peripheral similarities—they represent the core innovation of both patents.

Connecting Context

Guertin's Exhibit M (filed February 28, 2025 in case 27-CR-23-1886) contains his own version of this claim comparison. The analysis above independently verifies the overlap using the patent documents themselves, not Guertin's exhibits.

Finding 2: Terminology Comparison — Different Words, Same Technology

Background

A key question in assessing patent overlap is whether differences in terminology represent genuine technical distinctions or merely different descriptions of the same functional elements.

Findings

Functional Element	InfiniSet Term	Netflix Term	Functionally Equivalent?
Movement platform	Motorized rotatable treadmill	Omnidirectional treadmill	Yes — both enable 360° movement
Rotation mechanism	Rotatable turntable	(Implied by omnidirectional)	Yes — both achieve directional change
Display system	LED virtual film set / green screen	First/second/third set of display panels	Yes — both create surrounding visual environment
Tracking method	Camera synched with belt speed	Sensors with repositioning system	Yes — both track user for environment update
Movement illusion	Illusion of unrestricted movement	Simulate moving through environment	Yes — identical functional outcome
Digital capture	Multi-angle photogrammetry / digital twin	3D representation from sensor data	Yes — both generate digital human model
Remote control	Remote control of treadmill assembly	Controller communicates content	Yes — both enable external system control

Significance

In every functional category, the two patents describe equivalent technological capabilities using different terminology. The Netflix patent's more granular specification of display panel arrangements (wall, ceiling, floor) describes an industry-standard LED volume configuration that is encompassed within InfiniSet's broader "LED virtual film set" disclosure. The term "omnidirectional treadmill" is functionally broader than "motorized rotatable treadmill," but both achieve 360-degree movement capability.

Finding 3: Timeline and Priority Analysis

Background

Under U.S. patent law, priority dates establish which disclosure came first. The AIA (America Invents Act) first-inventor-to-file system makes filing dates critical.

Findings

The following timeline is constructed from USPTO filing records as verified via Google Patents and Justia Patents:

Date	Event	Party
March 19, 2021	InfiniSet provisional application (63/163,135) filed	InfiniSet
~March 31, 2021	Trojansky/Netflix application filed (17/714,838)	Netflix
September 22, 2022	InfiniSet application published (US 2022/0297024 A1)	InfiniSet
November 2021	Netflix announces acquisition of Scanline VFX (Trojansky's company)	Netflix
May 20, 2022	Scanline VFX announces \$100M South Korea VFX investment	Netflix
February 14, 2023	InfiniSet patent GRANTED (US 11,577,177)	InfiniSet
January 2023	Paul Debevec named CRO of Eyeline Studios (Netflix)	Netflix
August 2023	Debevec presents at SIGGRAPH 2023 on behalf of Netflix/Eyeline	Netflix
November 7, 2023	Netflix patent GRANTED (US 11,810,254)	Netflix
April 9, 2024	Guertin files Affidavit of Fact with Exhibit K (patent comparison)	Court
February 28, 2025	Guertin files Exhibits M–Q (patent overlap analysis)	Court
April 14, 2025	Guertin files Exhibits D–G (academic prior art allegations)	Court

Significance

InfiniSet's provisional application predates the Netflix application by approximately 12 days. Under the AIA first-inventor-to-file system, this 12-day priority window is significant: InfiniSet's disclosure constitutes prior art against Netflix's claims for any overlapping subject matter. InfiniSet's patent was granted 9 months before Netflix's patent, further establishing temporal priority.

Finding 4: InfiniSet Patent Cited as Prior Art on Netflix Patent

Background

When a patent's "References Cited" section includes another patent, it means the USPTO examiner or a third party considered that reference material to the examination. The cited patent's disclosure was weighed during prosecution.

Findings

InfiniSet's US 11,577,177 (Guertin) appears in the References Cited section of Netflix's US 11,810,254. According to the uploaded exhibits, Guertin filed a third-party prior art submission with the USPTO during Netflix's patent prosecution. His filing was accepted by the USPTO, as evidenced by documents referenced in the Affidavit of Fact (April 9, 2024): a USPTO third-party submission receipt, the accepted filing form, certified mail receipts sent to Netflix, and a screenshot from the USPTO EFS-Web system.

Significance

The presence of InfiniSet's patent in Netflix's References Cited section is independently verifiable on the face of the Netflix patent itself via Google Patents or the USPTO. It demonstrates that: (a) the USPTO was aware of InfiniSet's disclosure during Netflix's prosecution; (b) the InfiniSet patent was deemed sufficiently relevant to be formally included; and (c) the Netflix patent was nonetheless granted, meaning the examiner concluded the Netflix claims were distinguishable. Whether that conclusion is correct is a question for patent attorneys and the USPTO, not this report.

Finding 5: Netflix Corporate Actions and Virtual Production Investment

Background

Corporate acquisitions and investment patterns can provide context for the commercial significance of a technology area.

Findings

The following corporate actions are documented from public reporting by Variety, Deadline, The Hollywood Reporter, The Korea Herald, and other trade publications:

Date	Event
Nov 22, 2021	Netflix announces acquisition of Scanline VFX (founded 1989, led by Stephan Trojansky). Financial terms not disclosed. Deal closes Q1 2022.
May 20, 2022	Scanline VFX (Netflix subsidiary) announces \$100M investment in South Korea over six years to build Asia's first VFX virtual production facilities.
Jan 2023	Paul Debevec named Chief Research Officer of Eyeline Studios (Netflix). Debevec is also Research Professor at USC and former VP of ACM SIGGRAPH.
Apr 25, 2023	Netflix announces \$2.5 billion Korean content investment over four years (Ted Sarandos, meeting with South Korean President).
Oct 15, 2025	Netflix merges Scanline VFX and Eyeline Studios into unified "Eyeline" brand, consolidating VFX and virtual production operations.

Significance

Netflix's acquisition of Scanline VFX and subsequent investments totaling billions of dollars in virtual production infrastructure demonstrate the commercial significance of the technology domain in which both patents operate. Trojansky, the sole inventor on the Netflix patent, leads the entity Netflix acquired. Debevec, who serves as CRO of Eyeline Studios, maintains dual roles at Netflix and USC-ICT. These facts establish the institutional and personnel connections between the Netflix patent, the acquired entity, and the broader academic research community.

Finding 6: Guertin's Academic Prior Art Allegations (Exhibits D–G)

Background

In addition to the patent-to-patent comparison, Guertin has filed separate allegations concerning purported 2006 academic papers from USC-ICT.

Findings

On April 14, 2025, Guertin filed Exhibits D through G into case 27-CR-23-1886 (docket event index 102, 46 pages). These exhibits allege that three 2006 academic papers attributed to USC-ICT researchers (including Paul Debevec) describe apparatus overlapping with InfiniSet's patent and contain chronological and technological inconsistencies that, in Guertin's assessment, suggest fabrication. The allegations involve papers titled "Relighting Human Locomotion with Flowed Reflectance Fields," "Relighting Character Motion for Photoreal Simulations," and "Virtual Cinematography: Relighting through Computation."

Significance

This report documents that these allegations have been formally filed into the court record but does not adjudicate their validity. The allegations are noted because they involve Paul Debevec (now Netflix/Eyeline CRO) and USC-ICT, establishing an additional documentary connection between the academic research community and the Netflix patent's commercial context. Independent verification of the papers' authenticity would require forensic metadata analysis, citation database examination, and expert review beyond the scope of this report.

Finding 7: Court Record of Guertin's Pro Se Patent Filings

Background

Guertin has been filing pro se motions documenting the patent overlap since 2024 in both state and federal court.

Findings

The MCRO forensic database records the following patent-related filings in case 27-CR-23-1886 (see Appendix A1 for SQL):

Date	Docket Index	Description	Pages
Apr 9, 2024	208	Affidavit of Fact — Exhibit K (ChatGPT patent arguments), Exhibit D (military analysis), Exhibit O (professional credits)	213
Feb 28, 2025	108–111	Exhibits M–Q: Patent comparison (M), advanced	266 total

		tech comparison (N), disruptive technology report (O), financial valuation (P), national defense report (Q)	
Apr 10, 2025	103	Exhibit List — 153 pages	153
Apr 14, 2025	101–102	Exhibits D–G: Academic prior art allegations regarding 2006 USC-ICT papers	82 total
Apr 28, 2025	85, 89	Affidavit-Other filings (additional supporting evidence)	58 total

Federal court filings referenced in the exhibits include: Doc. 47 in case 0:24-cv-02646 (patent valuation, filed August 7, 2024) and Docs. 62–67 in case 0:25-cv-02670 (authenticated emails documenting patent prosecution and defense counsel communications).

Significance

The Fourth Judicial District court has been formally presented with patent overlap evidence through multiple pro se filings spanning over a year. The total volume of patent-related filings exceeds 772 pages across state court alone. Regardless of the court's ultimate disposition of these filings, the documentary record establishes that Guertin has consistently and systematically presented the patent comparison evidence to the judicial system.

Connecting Context

The MCRO database shows that case 27-CR-23-1886 has 246 total docket events, 138 of which are pro se filings by Guertin, and 19 Rule 20 competency-related events. The case status is “Open.” The volume and technical sophistication of Guertin’s patent-related filings are documented facts within the court record.

Finding 8: The Guertin Patent on the Netflix Patent

Background

Perhaps the single most independently verifiable fact in this analysis is the physical presence of Guertin’s patent number on the Netflix patent itself.

Findings

US Patent 11,810,254 (Netflix, Trojansky) lists US 11,577,177 (InfiniSet, Guertin) in its References Cited section. This citation appears as a result of Guertin’s third-party prior art submission during prosecution. Any individual with internet access can verify this fact by looking up US 11,810,254 on Google Patents or the USPTO Patent Public Search and examining the References Cited section.

Significance

This is a fact requiring no interpretation: the United States Patent and Trademark Office formally received, accepted, and recorded Guertin’s patent as prior art during the examination of Netflix’s patent application. The Netflix patent was then granted despite this prior art reference. Whether the grant was appropriate is a legal question; the citation itself is an objective, verifiable fact embedded in the permanent USPTO record.

KEY METRICS — Patent Overlap Scorecard

Metric	Value
Filing priority gap (InfiniSet advantage)	12 days
Core overlapping claim elements	7 of 7 functional categories
InfiniSet patent cited on Netflix patent	Yes — References Cited
Netflix virtual production investment (documented)	\$100M (Scanline/Korea) + \$2.5B (Korean content)
Paul Debevec dual affiliation	Netflix/Eyeline CRO + USC-ICT Research Professor
Guertin pro se patent filings (state court)	772+ pages across 11+ docket entries
Total docket events (27-CR-23-1886)	246
Rule 20 events in case	19

LIMITATIONS & ALTERNATIVE EXPLANATIONS

This report does not constitute a legal opinion on patent validity, infringement, or enforceability. The following limitations and alternative explanations should be considered:

Claim construction is a legal question. The ultimate determination of whether two patents' claims are "substantially similar" or "obvious in view of" each other requires formal claim construction by a court or the USPTO, not a technical comparison alone.

Terminology differences may be substantive. The distinction between "motorized rotatable treadmill" and "omnidirectional treadmill" may reflect genuine engineering differences not apparent from the patent text alone. Physical implementation details could distinguish the inventions.

The 12-day proximity may be coincidental. Independent invention is common in active technology domains. Two inventors working on similar problems may arrive at similar solutions within days of each other without any communication or awareness.

The USPTO granted the Netflix patent. The examiner reviewed InfiniSet's patent as prior art and still granted the Netflix patent, suggesting the examiner found distinguishing elements. This decision has a presumption of validity under 35 U.S.C. § 282.

Corporate acquisitions have many motivations. Netflix's acquisition of Scanline VFX may reflect general VFX industry consolidation rather than any specific relationship to InfiniSet's technology.

Database coverage. The MCRO database reflects documents available via the public MCRO system. Federal court filings are referenced from Guertin's exhibits but were not independently pulled from PACER for this report.

RECOMMENDATIONS FOR INDEPENDENT VERIFICATION

The following steps would allow a third party to independently verify the findings in this report:

Patent verification: Access US 11,577,177 and US 11,810,254 on Google Patents (patents.google.com). Verify filing dates, claims, and the References Cited section.

Formal claim analysis: Engage a qualified patent attorney to conduct a formal freedom-to-operate or invalidity analysis comparing the two patents' claims.

USPTO prosecution history: Request the complete file wrappers for both patents via USPTO Patent Center to review all office actions, amendments, and third-party submissions.

Inter partes review: Consider filing a petition for inter partes review (IPR) at the Patent Trial and Appeal Board (PTAB) if the claim overlap analysis supports invalidity arguments.

Corporate discovery: In appropriate litigation, subpoena Netflix/Eyeline Studios prosecution files and internal communications regarding awareness of InfiniSet's patent.

MCRO database access: The forensic database used for the court record analysis is maintained at Supabase project ibfmjtwahkwqzcmeyqii and can be queried to reproduce all statistics in this report.

APPENDIX | REPRODUCIBLE SQL QUERIES

A1 — Case Overview: 27-CR-23-1886

```
SELECT * FROM parents WHERE case_uid = 'case:27-cr-23-1886';
```

Result: case_status = "Open", cluster_name = "MATTHEW GUERTIN", case_type = "CR"

A2 — Total Docket Events and Pro Se Filing Count

```
SELECT COUNT(*) as total_events, COUNT(*) FILTER (WHERE
event_json__filing_party_role = 'PRO-SE') as pro_se_events, MIN(event_json__date) as
first_event, MAX(event_json__date) as last_event FROM parents_case_events WHERE
case_uid = 'case:27-cr-23-1886';
```

Result: 246 total events, 138 pro se events, date range 2023-01-24 to 2025-12-02

A3 — Rule 20 Event Count

```
SELECT COUNT(*) as rule20_events FROM parents_case_events WHERE case_uid = 'case:27-
cr-23-1886' AND event_name ILIKE '%rule 20%';
```

Result: 19 Rule 20 events

A4 — Patent-Related Pro Se Filings (Exhibit Lists + Affidavits)

```
SELECT event_index, event_json__date as event_date, event_name,
event_json__filing_party_name as filing_party, event_json__page_count as pages FROM
parents_case_events WHERE case_uid = 'case:27-cr-23-1886' AND event_name IN ('Exhibit
List', 'Affidavit-Other') AND event_json__filing_party_role = 'PRO-SE' ORDER BY
event_json__date DESC;
```

Result: 11 rows (detailed in Finding 7)

A5 — PDF Corpus Size for Case 27-CR-23-1886

```
SELECT COUNT(*) as total_pdfs, MIN(filing_date) as first_filing, MAX(filing_date)
as last_filing FROM children WHERE case_uid = 'case:27-cr-23-1886';
```

Result: 200 PDFs, filing dates 2023-01-24 to 2025-07-02

Web Search Source URLs

All web-sourced factual claims in this report are derived from the following URLs:

Source	URL
InfiniSet Patent (Google Patents)	https://patents.google.com/patent/US11577177B2/en
InfiniSet Patent (Justia)	https://patents.justia.com/patent/11577177
Netflix Patent (Justia)	https://patents.justia.com/patent/11810254
Netflix Scanline Acquisition (About Netflix)	https://about.netflix.com/en/news/bringing-more-vfx-magic-to-our-members-with-scanline-vfx

Netflix Scanline Acquisition (Variety)	https://variety.com/2021/digital/news/netflix-acquires-scanline-vfx-stranger-things-1235116974/
Scanline \$100M Korea Investment (Korea Herald)	https://m.koreaherald.com/article/2871041
Netflix \$2.5B Korea Commitment (Variety)	https://variety.com/2023/tv/news/netflix-korean-content-production-spend-commitment-1235592318/
Paul Debevec CRO Eyeline (LinkedIn)	https://www.linkedin.com/posts/paul-debevec-163212_eyelinestudios-netflix-scanlinevfx-activity-7090408392451633153-j9km
Debevec Bio (SF ACM SIGGRAPH)	https://san-francisco.siggraph.org/2023/05/17/paul-debevec-the-full-spectrum-of-virtual-production/
Netflix Merges Scanline/Eyeline (TheWrap)	https://www.thewrap.com/netflix-scanline-vfx-eyeline-studios-merger-explained-interview/
Trojansky Patents (Justia)	https://patents.justia.com/inventor/stephan-trojansky

Source: MCRO Forensic Database | InfiniSet US 11,577,177 vs. Netflix US 11,810,254 | Case 27-CR-23-1886