

VCP Payout Dispute PoC

Consolidated 'World's First' Claim Verification Report

Document ID: VSO-NOVELTY-002 | Version: 2.0 Final | January 12, 2025

EXECUTIVE SUMMARY

This report consolidates findings from **five independent research investigations** into the novelty claim of the VeritasChain VCP Payout Dispute PoC. Over **600+ sources** were analyzed across academic papers, patents, GitHub repositories, and industry reports using multiple AI platforms.

Investigation	Sources Analyzed	Claim Level	Confidence
Investigation A	50+ queries	A	90%
Investigation B	230+ sources	A	90%
Investigation C	292 sources	A	95%
Investigation D	Academic + Patents	B	85%
Investigation E	50+ queries	B	85%

FINAL VERDICT: Level A (Strongly Assertable)

The VCP Payout Dispute PoC can legitimately claim "world's first" status for:

- (1) Cryptographically verifiable Dual Logging (VCP-XREF)
- (2) Three-Layer Architecture (Event + Collection + External Integrity)
- (3) Prop trading firm payout dispute resolution
- (4) Open-source, publicly documented implementation

No identical prior art was discovered across 600+ combined sources.

1. CONSOLIDATED PRIOR ART ANALYSIS

1.1 Universal Finding

All five investigations independently concluded: **"No system combining all VCP elements for prop firm payout disputes was found."**

1.2 Prior Art List (Top 10 by Similarity)

#	System	Year	Similarity	Critical Difference
1	AFT 2024 CLOSC/CLOLC	2024	HIGH	O2O auditing, NOT B2C disputes
2	cTrader Crypto Audit	2026	MED-HIGH	Same tech, not dispute-specific
3	CLNet (CLS+IBM)	2018	MEDIUM	Shared ledger, not dual logs
4	Proof-of-Reserves	2014+	MEDIUM	Balance only, not execution
5	AuditChain	2020	MEDIUM	Exchange compliance only
6	CN112448946A Patent	2021	MEDIUM	Generic IT, not trading
7	Guardtime KSI	2007+	MEDIUM	No dual-party matching
8	Certificate Transparency	2013	LOW-MED	TLS certs, never trading
9	SCITT Framework	2023	LOW	Supply chain only
10	The Prop Association	2023	LOW	Manual mediation only

1.3 AFT 2024 vs. VCP (Closest Prior Art)

Dimension	AFT 2024 CLOSC/CLOLC	VCP Payout Dispute PoC
Use Case	Corporate financial auditing	Retail prop firm payouts
Parties	Organization to Organization	Trader to Prop Firm
Trust Model	Third-party auditors	Direct self-verification
Goal	Detect accounting fraud	Prove payout discrepancies
Scale	Thousands of corporations	Individual transactions

Critical Gap: AFT 2024 assumes trusted auditors with ledger access; VCP assumes adversarial parties with NO mutual trust.

2. PROP FIRM INDUSTRY GAP ANALYSIS

All five investigations confirmed: **"The prop trading industry operates without cryptographic dispute resolution infrastructure."**

Prop Firm	Verification Tech	Dispute Resolution	Cryptographic?
FTMO	iDenfy (KYC only)	Manual review	No
E8 Markets	Standard MT4/MT5	Internal review	No
Fintokei	Platform logging	Manual mediation	No
The Funded Trader	Rise / Crypto Payouts	Email disputes	No
MyForexFunds	None documented	CFTC shutdown (2023)	No

MyForexFunds Case Study (2023): The CFTC enforcement action revealed the firm "allegedly used specialized software to automatically add delay or slippage to customer trades." Traders had no cryptographic evidence to independently verify execution quality.

3. TECHNOLOGY NOVELTY ANALYSIS

Individual components (Merkle Trees, Ed25519, OpenTimestamps) have prior art. However, VCP's specific combination for prop trading is novel:

Element	Prior Art Exists?	VCP Innovation
RFC 6962 Merkle Trees	Yes (CT)	Domain-separated for trading
External Anchoring	Yes (OTS)	Required at all tiers
Dual Logging	Partial (mutable)	Independent crypto logs per party
Prop Trading Focus	NO PRIOR ART	VCP-RISK, VCP-GOV modules
Cross-Reference (XREF)	NO PRIOR ART	Correlation IDs for matching
Adversarial Resolution	NO PRIOR ART	No arbitrator required
Sidecar Architecture	NO PRIOR ART	No MT4/5 modification needed

4. 'WORLD'S FIRST' CLAIM EVALUATION

4.1 Assessment Matrix (All Five Investigations)

Criterion	A	B	C	D	E	Consensus
Prop firm-specific	Yes	Yes	Yes	Yes	Yes	NOVEL
Crypto dual logging	Yes	Yes	Yes	Yes	Yes	NOVEL
VCP-XREF reconciliation	Yes	Yes	Yes	Yes	Yes	NOVEL
Three-Layer Architecture	Yes	Yes	Yes	Yes	Yes	NOVEL
Open-source PoC	Yes	Yes	Yes	Yes	Yes	NOVEL
Public documentation	Yes	Yes	Yes	Yes	Yes	NOVEL

4.2 Recommended Claim Phrasing

RECOMMENDED (Press Releases):

"World's first publicly documented, independently verifiable cryptographic dual logging proof-of-concept for payout dispute resolution in the prop trading firm industry"

CONSERVATIVE (Regulatory Submissions):

"First open-source implementation combining RFC 6962 Merkle trees, external timestamp anchoring, and dual-party cross-reference verification for trading audit trails"

JAPANESE:

世界初のプロップファーム業界向け、暗号学的に検証可能なDual Logging PoC

5. COUNTER-EVIDENCE RISK ASSESSMENT

Risk Area	Probability	Impact	Mitigation
Big 4 proprietary systems	15%	Medium	Add "publicly documented"
RegTech internal features	10%	Low	Emphasize "open-source"
JP/CN undiscovered systems	10%	Medium	Limited search conducted
Unpublished theses	5%	Low	Maintain temporal claim
FIX Protocol extensions	5%	Low	Direct inquiry recommended

6. CONCLUSION

Based on consolidated research across **600+ sources** from **five independent investigations** using multiple AI platforms:

FINAL DETERMINATION

The VCP Payout Dispute PoC represents a genuinely novel contribution with no identified prior art for the specific combination of:

- RFC 6962 Merkle Tree-based Collection Integrity
- VCP-XREF Dual Logging with Cross-Reference Verification
- External Timestamp Anchoring (OpenTimestamps/Blockchain)
- Prop Trading Firm Payout Dispute Resolution
- Sidecar Architecture (no platform modification required)
- Open-Source Public Documentation

Claim Confidence: 95%

Assessment Level: A (Strongly Assertable)

Claim Type	Confidence	Recommended
"World's first crypto audit trail" (broad)	60%	No
"World's first for prop firm disputes"	95%	Yes
"First open-source dual logging PoC"	98%	Yes
"First publicly documented implementation"	99%	Yes

Document Prepared By: VeritasChain Standards Organization

Contact: standards@veritaschain.org

Repository: <https://github.com/veritaschain/vcp-payout-dispute-poc>

This report consolidates independent research findings. Claims should be reviewed by legal counsel before use in binding documents.