ION Video Ltd (ASX:IOV)

ION Files Fourth Foundational Patent for Sample-Level Video Authentication

Melbourne, Australia, 1 June 2026: ION Video Limited (ASX: IOV) ("ION" or "the Company") advises that it has received notification from IP Australia confirming the filing of its fourth foundational patent in the Company's Virtual Video intellectual property portfolio. Australian Patent Application **No. 2026904970**, titled System and Method for Policy-Gated Authentication and Cryptographic Hashing and known as the Right to Identify References, establishes a framework for authenticating digital video as genuine, human-created content at the individual binary sample level.

New "Right to Identify References" Architecture Verifies Human-Created Video at the Binary Sample Level

The filing directly addresses one of the most pressing questions now facing the global video industry: how a viewer, platform or institution can know whether the content they are watching is real. Rather than attempting to detect synthetic media after it has been created, the invention establishes a permanent cryptographic record of authenticity that is bound to the underlying structure of the video itself.

Highlights

- **Fourth foundational patent filed:** IP Australia has confirmed the filing of Patent Application **No. 2026904970**, System and Method for Policy-Gated Authentication and Cryptographic Hashing, the fourth patent family in ION's Virtual Video portfolio, referred to as the Right to Identify References.
- **Authentication at the binary sample level:** The invention verifies digital video as authentic, human-created content at the level of individual binary samples, rather than at the file or pixel level, creating a cryptographic record that does not weaken as generative AI capability advances.

- **Universal adapter architecture:** A configurable Authentication Policy Engine unifies disparate trust signals, including C2PA content credentials, camera sensor fingerprinting, codec forensics, AI detectors, studio attestations and capture-device registries, under a single, signed, policy-gated cryptographic record.
- **Completes a four-layer architecture:** Patent Family 4 sits alongside ION's three existing patent families to form an end-to-end stack spanning four functions: virtualise, record, govern and authenticate.
- **Establishes priority date:** The filing secures ION's global priority date for the invention as the Company progresses its broader portfolio toward international protection.
- **Review the patent filing:** Shareholders and interested parties can review the patent filing information on ION's website **HERE**.
- **Watch the briefing from Finbar O'Hanlon:** ION has released a video in which Founder and Head of Innovation Finbar O'Hanlon explains Patent Family 4, how it works and its commercial significance, available **HERE**.

Background: Authenticating Real Video in the Age of Generative AI

Generative AI models are now capable of producing synthetic video that is, to the human eye, indistinguishable from genuine footage. As a result, the trust layer that underpins video, across news, entertainment, financial services, government and enterprise communications, is increasingly under pressure.

Existing approaches to this problem are largely reactive. Detection tools that analyse the decoded pixels of a video are engaged in a continual arms race with generative models, and each new detector can be defeated by the next generation of synthesis. Provenance metadata such as content credentials can be stripped or lost during re-encoding and redistribution; invisible watermarks are fragile under common transformations such as compression and cropping; and hardware capture signatures verify only the single moment of capture. None of these methods compose multiple trust signals together, and none operate at the binary sample level.

ION's invention takes a different approach. Instead of treating video as a sealed, finished file and attaching verification from the outside, it binds authentication directly to the fundamental structure of the media and records it in an immutable registry that exists independently of the file.

How the Technology Works

When video enters the system, it must first pass through an Authentication Policy Engine, a configurable gate that evaluates incoming footage against a signed authentication policy. Studios, broadcasters, government agencies and enterprises can each author their own policy, defining which trusted authentication sources must be satisfied before content is admitted to the trust system.

These authentication sources are integrated through a universal adapter layer. Pluggable adapters allow the engine to unify disparate and competing standards, including C2PA content credentials, camera sensor fingerprinting, codec forensics, generative-AI classifiers, studio attestations and capture-device registries, rather than replacing any one of them. Each policy is expressed as a signed data object using composable Boolean logic such as ALL OF, ANY OF, and N OF M, allowing graduated trust thresholds to be defined for different types of content.

Once footage passes the gate, the system indexes the individual binary samples within the video by byte offset, length and temporal position, and computes a cryptographic hash of the raw encoded data of each selected sample, being the actual bytes produced by the codec rather than the pixels displayed on screen. These hashes are compiled, together with the full authentication record, into a compound record known as the Sample Identity Manifest, which is registered in an immutable trust registry.

Each time the video is later assembled and played back, the system verifies every binary sample against its registered hash in real time. Where the bytes match, the sample is confirmed as authentic; where they do not, the sample is flagged as unverified or modified. The Company can configure how the system responds, whether by blocking playback, signalling unverified samples to the viewer, or logging results for audit, and every verification event is traceable through a provenance report.

Why This Matters

Because verification is performed against the cryptographic identity of the underlying bytes, the protection does not depend on the relative sophistication of detection tools and does not degrade as generative AI improves. A generative model cannot reproduce the identical byte-level encoding of an authenticated, camera-captured sample without access to that specific binary data.

The computationally intensive cost of forensic authentication is incurred only once, at the point of registration, while every subsequent playback inherits that established trust through computationally trivial hash comparisons. Because the manifest and its provenance record exist outside the media file, the record survives re-encoding and redistribution, while any alteration to the binary samples is immediately detectable as a hash mismatch. As new forensic techniques and provenance standards emerge, they can be added as new adapters without changes to the core media pipeline.

A Complete Four-Family Architecture

Patent Family 4 is designed to operate as part of ION's broader Virtual Video architecture, which the Company has been developing since it filed its first patents in 2007.

- **Patent Family 1 (Virtualise):** Virtual video containers that separate a video's structure from its binary samples, making sample-level addressing possible. Granted across fourteen jurisdictions.
- **Patent Family 2 (Record):** An immutable distributed ledger that maintains a permanent, consensus-validated record of content transactions. Granted across fourteen jurisdictions.
- **Patent Family 3 (Govern):** The Right to Resolve References, a cryptographic Video Token that governs who can assemble content, and under what conditions, at the sample level.
- **Patent Family 4 (Authenticate):** The Right to Identify References, the subject of this filing, which gates what enters the trust system and cryptographically proves the identity of every sample thereafter.

Together, the four families provide an integrated architecture across four functions (virtualise, record, govern and authenticate) spanning the full lifecycle of video from container, to record, to governed assembly, to verified identity.

Strategic Significance

The filing establishes ION's priority date for the invention and extends the Company's intellectual property position from the structure, governance and resolution of video into its authentication. ION believes the infrastructure layer that authenticates video as human-created, at the binary sample level, represents a distinct and protectable technical category that is increasingly relevant as generative AI is used to create video, autonomous agents are used to assemble it, and governments move to legislate video provenance.

The Company intends to position the Right to Identify References as a foundational component of its licensing strategy and ongoing partner discussions, alongside its existing patent families. Further updates on patent prosecution, partner activity and commercial milestones will be provided as material developments occur, in line with the Company's continuous disclosure obligations.

Comment from ION

Commenting on the filing, ION Founder and Head of Innovation Finbar O'Hanlon said:

"What we have set out to do with this patent is give video a way to prove it is real. The Right to Identify References verifies content at the binary sample level using cryptographic hashing, so the proof lives in the bytes themselves rather than in the pixels on the screen. It is designed to remain effective as generative AI advances, and to survive everyday changes to a file such as re-encoding and compression."

ENDS

Authorised for release by the Board of Directors

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About ION Video Limited

ION Video Limited (ASX: IOV) is an infrastructure company that has developed patented technology to virtualise video at the file architecture level, transforming static files into programmable data. Protected by a portfolio of granted patents and pending patent applications spanning four foundational patent families, ION's technology enables intelligent systems to access and compose with existing video content as programmable data, without transcoding.

For additional information about ION, please visit www.ion.video

Forward-Looking Statements

This announcement contains forward-looking statements regarding ION's technology, market positioning and strategic priorities. These statements are based on current expectations and are subject to risks and uncertainties. Actual results may differ materially from those expressed or implied in these statements. This announcement has been prepared in compliance with ASX Listing Rule 3.1 regarding continuous disclosure obligations.