Fall 2025 Volume 30.1

Patent Points ☑

NOW STARTING MY 32ND YEAR...

PTO Cuts Staff, Delays Up

Delays at the US Patent Office are predicted to rise as a result of federal government staffing cuts. Most federal employees were given a buyout offer to resign, and many patent examiners and other PTO staff accepted these offers, including the Commissioner for Patents. As with any large cuts, morale among the remaining staff is expected to decline as they are forced to take on the additional workloads of their former colleagues.

The PTO has had a telework program since 1997, with about 13,000 remote workers, including many patent examiners. The remote work program allowed the PTO to hire technical talent that did not want to relocate to Washington, D.C. Now these examiners may be required to work in the office due to an Executive Order mandating a return to in-person work across all federal agencies. However, the PTO currently does not have enough desk space for all these remote workers.

Companies that have implemented Return-To-Office (RTO) policies have seen increases in attrition, and the PTO is likely to see further resignations of skilled patent examiners. There is also a hiring freeze, so the PTO cannot replace lost staff, much less implement existing plans to hire hundreds of examiners.

Delays Already Increasing

The Patent Office's online data dashboard shows the First Office Action Pendency at 22.6 months, which has been steadily rising for the last 10 years. Still, this is a 20% jump from the prior year. Pendency is the time from filing until receiving the first office action from the examiner.

Delays vs. Examiner-Specific Allowance Rates

We often see much lower pendency, such as the patent shown on page 3 that had a first-action pendency of less than one year. However, my slowest case is at 3 years, 5 months without seeing the first action, so some cases are much slower.

INSIDE

Usually these slow cases are assigned to examiners who have low allowance rates. Not allowing patents results in extra office actions, resulting in more work for that examiner and hence slower turnover.

The examiner with the 3+ year pendency has a 56% allowance rate, according to the statistics from patentbots.com, placing him at the 75th percentile across all examiners, with 100th percentile the most difficult.

In contrast, the case allowed in 1 year was by an examiner with an 82% allowance rate, being in the 36th percentile across all examiners. So the examiner you are assigned to makes a big difference.

Crypto-Patent-Friendly Policy Flip

The USPTO is expected to strengthen patents in administration-favored fields such as cryptocurrency. Section 101 rejections in particular are expected to decline.

Data from October 2025 shows that the Patent Appeal Board (PTAB) has dramatically reduced its issuance of new grounds for rejection under Section 101 while simultaneously increasing reversals of examiner 101 rejections. A month earlier the new PTO director gave new direction on patent eligibility, section 101, that would benefit cryptocurrency patents.

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Now is the Time to File AI Patents !

Artificial Intelligence (AI) is another favored field, and it is expected that AI patents will be easier to obtain going forward. Although software patents have traditionally been difficult to get through the PTO, AI and Neural Network patents will likely become easier to obtain allowances, at least for the next 3 years. After that policy may flip again. Since well-written AI patents can get allowed in about one year (see the example patent on page 3), now may be a very good time to increase filing of AI-related patents, before the pendency increases due to the lower staffing levels.

Patent of the Year

My informal “Patent of the Year” is shown on the next page.

An image-guided diffusion network has two Convolution Neural Networks (CNNs). A RGB image and an IR image are concatenated with a Gaussian noise image and input to a denoising neural network that merges information from the RGB and IR images as noise is removed over many iterations. Then an enhancement neural network up-samples for Super Resolution (SR) and convolutes to generate a condition vector that controls Global Feature Modulation (GFM) at three convolution layers to generate an enhanced fusion image.

Despite being a complex AI patent with 2 Neural Networks, this patent issued in just 16 months after its filing date.

Congratulations to all the inventors !

US012354241B1

(12) **United States Patent**
Wang et al.

(10) **Patent No.: US 12,354,241 B1**
(45) **Date of Patent: Jul. 8, 2025**

(54) **DIFFUSION-BASED MULTIPLE-MODALITY IMAGE FUSION**

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(73) Assignee: **Hong Kong Applied Science and Technology Research Institute Company Limited**, Hong Kong (HK)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **18/603,206**

(22) Filed: **Mar. 13, 2024**

(51) **Int. Cl.**
G06T 5/50 (2006.01)
G06T 3/4053 (2024.01)
(Continued)

(52) **U.S. Cl.**
CPC ***G06T 5/50*** (2013.01); ***G06T 3/4053*** (2013.01); ***G06T 5/70*** (2024.01); ***G06V 10/42*** (2022.01);
(Continued)

(58) **Field of Classification Search**
CPC G06T 5/50; G06T 3/4053; G06T 5/70; G06T 2207/10024; G06T 2207/10048;
(Continued)

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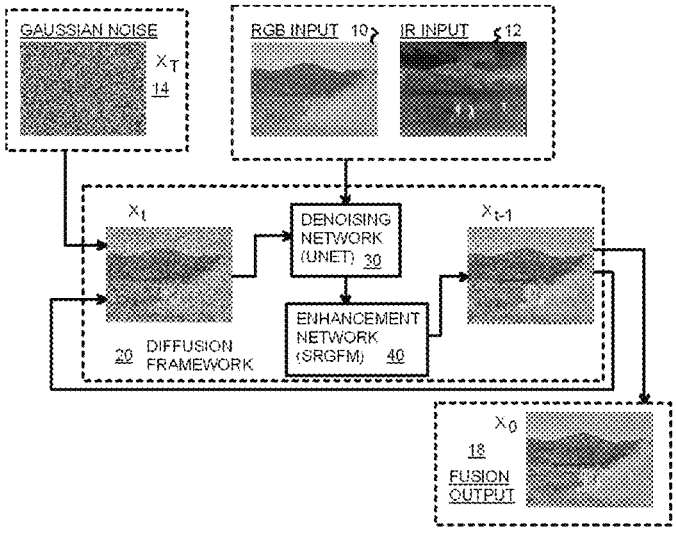
(57) **ABSTRACT**

An image-guided diffusion network has two Convolution Neural Networks (CNNs). A RGB image and an IR image are concatenated with a Gaussian noise image and input to a denoising neural network that merges information from the RGB and IR images as noise is removed over many iterations. Then an enhancement neural network up-samples for Super Resolution (SR) and convolutes to generate a condition vector that controls Global Feature Modulation (GFM) at three convolution layers to generate a SRGFM enhanced fusion image. Timesteps are embedded using adaptive group normalization blocks within Adaptive Bottleneck Residual (ABR) blocks in the denoising network, which is a UNet having many levels of ABRs, and in the enhancement network before feature modulation. Global image features are detected by triple convoluting the image input to the enhancement network to generate the condition vector that controls feature modulation blocks at three layers of convolution.

20 Claims, 19 Drawing Sheets



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611 Patents Issued

After 31 years of writing patents as a full-time Patent Agent, 611 applications that I've written have now issued as patents. Congratulations inventors!

You can view the 611 issued patents I've written at:

www.gpatent.com

Rates Set for 2026

My hourly rate for 2025 will be $490 per hour, billed in quarter-hour increments. Fixed-price quotes are available for patent applications to facilitate budgeting and avoid expensive surprises.

Prosecution work such as amendments and other paperwork is billed at the hourly rate. Litigation-support work is billed at a higher rate. Patent searches are billed at a flat $800 for U.S. abstract searches. Patents can be viewed on-line.

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Address Correction Requested