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SOFTWARE AND AI PATENTS ABROAD

A Changing US Landscape for South African Innovators

White Paper by Tim Laurens
Senior Associate | Patents | KISCH IP

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One invention. Different outcomes

A South African technology company can develop one invention, prepare one technical disclosure and pursue an international patent strategy around it, yet receive materially different answers in South Africa, Europe and the United States.

For software and artificial intelligence innovators, this is more than a legal curiosity.

The United States is an important market for many South African technology businesses, particularly where international investors, strategic partners, potential licensees or acquirers form part of the commercial plan. A credible US patent position may therefore influence not only the protection available in that market, but also discussions about funding, licensing, valuation and international expansion.

The difficulty is that software and AI inventions do not enter a harmonised global patent system. A South African provisional patent application and subsequent Patent Cooperation Treaty (PCT) application may provide the foundation for an international filing programme, but each national or regional patent office ultimately applies its own law.

An invention may solve a genuine engineering problem, be new and technically sophisticated, and appear well suited to protection in South Africa and Europe. Its corresponding US application may nevertheless encounter an entirely different obstacle: whether it qualifies as patent-eligible subject matter under section 101 of the United States Patent Act.

For South African innovators contemplating protection abroad, understanding this distinction early can materially affect the filing strategy.

Three systems. Different approaches

South Africa, Europe and the United States all place limits on the patentability of computer programs, mathematical methods or abstract subject matter, but they do not approach those limits in precisely the same way.

South Africa	Europe	United States
The Patents Act excludes computer programs and mathematical methods “as such”, leaving scope for computer-implemented inventions that form part of a technical process or system.	The European Patent Office has developed a structured approach centred on technical character and whether the computer implementation produces a further technical effect.	Section 101 is supplemented by judicial exceptions, including the concept of an “abstract idea”, which has created a separate eligibility hurdle for many software and AI applications.

South Africa also operates a registration-based patent system without substantive examination of novelty and inventive step before grant. Registration should therefore not be interpreted as a final determination of validity. The underlying invention must still satisfy the requirements of the Patents Act if its validity is subsequently challenged.

The European Patent Office takes a more developed approach to computer-implemented inventions. A conventional business rule does not ordinarily become patentable simply because it has been automated.

Software that contributes to a technical process or improves the operation of a technical system may, however, support patent protection where the technical contribution is properly identified.

AI and machine-learning inventions are assessed within the same framework. A computational model may be mathematical in itself, but its use within a particular technical implementation can form part of a patentable invention.

This means that a South African-originated AI invention could progress favourably in Europe while encountering a different analysis in the United States.

Additional US hurdle

Novelty, inventive step or non-obviousness, and adequate disclosure are familiar patentability enquiries. They allow the invention to be considered against the prior art and the contribution made by the claimed technology. US patent eligibility adds another threshold.

Following the Supreme Court decisions in *Mayo Collaborative Services v Prometheus Laboratories, Inc.* and *Alice Corp. v CLS Bank International*, patent claims may be rejected because they are considered to be directed to a judicial exception, including an abstract idea, before the usual novelty and non-obviousness enquiries resolve the matter.

This has proved particularly difficult for software and AI inventions. A claim centred largely on collecting information, analysing it and producing a result can be vulnerable. An invention directed to a particular technological improvement has a stronger basis for demonstrating that something more than an abstract objective is involved.

The difficulty is not simply that the United States applies a demanding test. It is that the boundary can be difficult to predict.

The expression “abstract idea” has not been reduced to a single clear statutory definition. The way an invention is characterised can therefore become critically important. A specific technological solution viewed at one level may look considerably more abstract when described only by its ultimate objective.

That uncertainty carries a commercial cost. Applicants may face additional prosecution, amendment and expense in a market that is frequently central to their international commercialisation strategy.

PERA and the proposed reset

The Patent Eligibility Restoration Act of 2025, or PERA, seeks to change that framework.

PERA was introduced in the US Senate as S.1546 and in the House of Representatives as H.R.3152 on 01 May 2025. As at August 2026, it remains proposed legislation. S.1546 remains referred to the Senate Judiciary Committee and the House version remains before the House Judiciary Committee. The Senate Judiciary Committee returned to the wider patent-eligibility debate at a full committee hearing on 14 July 2026, demonstrating that the question remains an active legislative issue.

PERA would not create a general right to patent software or AI, nor would it remove the established requirements relating to novelty, non-obviousness or adequate disclosure.

Its significance lies instead in its proposed restructuring of the eligibility enquiry.

The Bill seeks to replace the existing judicial exceptions with defined statutory exclusions. Certain subject matter would remain outside patent protection, including a mathematical formula standing alone and specified activities that are substantially economic, financial, business, social, cultural or artistic in nature. The proposed legislation would also distinguish between processes that genuinely depend upon a machine and those in which a computer has merely been added to an otherwise excluded activity.

PERA also seeks to separate eligibility more clearly from the enquiries into novelty, non-obviousness and disclosure.

That distinction is important. A software or AI invention would still have to prove that it deserves patent protection. The proposed change is intended to provide a clearer route to having those substantive patentability questions considered without the application necessarily failing first because of an uncertain judicial conception of abstraction.

PERA may still be amended, delayed or not enacted. It should therefore be viewed as a development to watch rather than a change on which present filing decisions can safely be based.

Commercial relevance for South African innovators

For South African businesses, universities and research organisations, the significance of greater predictability in the United States could extend well beyond patent prosecution.

A US filing is expensive. The ability to assess its likely prospects with greater confidence assists businesses in deciding where limited patent budgets should be allocated and how international protection should be aligned with the markets that matter commercially.

The consequences can extend further. A credible US patent position may influence investor due diligence, licensing negotiations and acquisition discussions. For a South African start-up, international rights can help demonstrate that the opportunity attached to the technology is not confined to the domestic market. For a university technology-transfer office, a stronger international patent family may increase the range of prospective licensees capable of commercialising the invention. This is particularly relevant to the technologies being developed in South Africa.

Software and AI are increasingly embedded within innovations in mining and industrial control, energy management, agriculture, logistics, distributed infrastructure and public service delivery. South African developers may be solving technical problems arising from demanding operating environments and constraints that are not necessarily the primary focus of developers in larger markets.

The commercial opportunity may consequently be international from the outset.

A patent strategy built only around the law of the country in which the invention originated can then prove restrictive. The intended markets need to be considered while the invention and its technical contribution are still being documented.

Preparing under the law as it stands

South African applicants should not defer the preparation of strong patent applications in anticipation of PERA.

Even if the proposed legislation is enacted, the fundamental patentability requirements will remain. Novelty, non-obviousness and adequate disclosure will continue to determine whether protection is ultimately justified.

For software and AI innovations, careful attention should therefore be given to the underlying technical contribution. An application should be capable of explaining the technical problem being addressed, the role played by the computer-implemented invention and the technical improvement that results.

That distinction requires some care. An established technology does not become patentable merely because it has been given a new commercial use. A new application of known technology may, however, itself qualify for patent protection where it is novel and inventive over the prior art, including where that application produces a new or unexpected technical result.

The same early thinking can also support a more adaptable international patent family. Applications originating in South Africa may ultimately have to accommodate materially different approaches in Europe, the United States and other jurisdictions. Understanding the likely international destination of the technology before the first specification is settled can preserve considerably more strategic flexibility later.

The challenge is not confined to patent eligibility. Different jurisdictions may also take materially different approaches to the scope that an original patent specification is capable of supporting. Recent commentary on Chinese patent practice illustrates the point: a specification prepared to satisfy US requirements may still lose commercially valuable claim scope, or encounter validity problems, in China because Chinese law tests support by reference to the technical solution disclosed and the contribution actually made by the invention.

For South African applicants, the broader lesson is important. An international filing strategy should not assume that a specification capable of supporting protection in one major jurisdiction will necessarily perform equally well in another. Intended markets can influence the technical material that should be captured from the outset, particularly because shortcomings in the original disclosure may be difficult, or impossible, to repair later. *[Source note: Soo-Jin Kim and Ki-Sung Lee, "Why High-Quality U.S. Patent Specifications Face Fatal Failures in China", IPWatchdog, 26 August 2026.]*

Patent protection should also be considered within the broader IP strategy. Not every valuable element of a software or AI system necessarily belongs in a patent application. Confidential implementation knowledge, source code and other know-how may in appropriate circumstances have greater commercial value if managed as trade secrets.

The objective is therefore not simply to secure the greatest possible number of patents. It is to identify which aspects of an innovation should be protected, where that protection has commercial value and how the resulting rights support the business or commercialisation plan.

Predictability has value of its own

PERA does not promise South African innovators an easier route to a US patent, and it would have no direct effect on patent law in South Africa, Europe or elsewhere. Its potential significance is more measured.

A clearer US eligibility framework could reduce one source of uncertainty surrounding software and AI inventions and allow the substantive technical merits of more applications to be tested under the patentability provisions intended for that purpose.

For businesses deciding whether to invest in US protection, universities evaluating the international potential of new technology and investors considering the strength of a patent portfolio, that predictability can have commercial value of its own.

In the meantime, the current position remains unchanged. International software and AI patent strategies need to be developed against the laws that apply today.

And regardless of the eventual fate of PERA, the strongest starting point remains the same: a clear understanding of the invention's technical contribution, its potential markets and the commercial role that patent protection is expected to perform.

How KISCH IP can assist

KISCH IP assists technology companies, inventors, universities and research institutions with patent strategies extending from the initial assessment of an invention through South African and international filing, prosecution and commercialisation.

For software and AI innovations with international potential, early consideration of the intended markets can help determine how the invention should be protected and how the resulting patent family can best support investment, licensing and commercial growth.

Tim Laurens

Senior Associate
T: +27 11 324 3107
E: TimL@kisch-ip.com