

12 July 2024

A New World – Without Patents

By Calixto Salomão Filho

Patent law has a profound impact on the social, environmental, and economic dynamics of societies. This commentary is a critical academic perspective on the theoretical underpinnings of patent law.

Le droit des brevets a un impact profond sur les dynamiques sociales, environnementales et économiques des sociétés. Ce commentaire est une perspective académique critique sur les fondements théoriques du droit des brevets.

El derecho de patentes tiene un profundo impacto en las dinámicas sociales, ambientales y económicas de las sociedades. Este comentario es una perspectiva académica crítica sobre los fundamentos teóricos del derecho de patentes.

A crucial aspect of academia involves envisioning an ideal world (or one that closely resembles it). Unlike practical or market professionals and actors in the political realm, academics are not confined by what is merely possible; rather, they aspire towards the ideal.

Naturally, these frameworks must be tested against reality, using empirical data - especially when examining the shortcomings of the existing systems, which can often illuminate the path towards a new world.

In law, certain ideal models are actually enshrined in international treaties, constitutional provisions, and legal statutes. However, their implementation is often hindered by pressure from more influential economic entities. One such model worth considering is patent law, given its profound impact (whether negative or positive) on the social, environmental, and economic dynamics of societies. Considering a new model, envisioning a “new world”, discussing it and imagining its ideal format is a duty of the academic profession.

Patents as a Rule versus Patents as an Exception

Patents are a topic in which conflicting interpretations have the most marked and direct influence on the various interests at stake.[1] In particular, two completely different descriptions of the world of technological production can be made, both supported by the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS Agreement).

The first, traditional, nineteenth-century view, is that of a patent as an exclusive right stemming from the invention - evoking the idea of a patent as an absolute right, justified by an original invention. It has strong support in traditional doctrine and jurisprudence. It is to some extent supported by the first part of the Article 27.1 of the TRIPS Agreement, which states that “patents shall be available for any inventions, whether products or processes, in all fields of technology” (i.e., the right to seek patent protection). This article leads to quite traditional interpretations on patents, linked to the very idea of property.

However, another diametrically opposed interpretation is possible, based curiously on the same treaty texts. The patent can be seen as the exception rather than the rule. To do so, one only needs to focus on the requirements for the granting of patents. This is stated in the same Article 27.1 of the TRIPS Agreement, but in its second part, which restricts the first: “provided that they are new, involve an inventive step and are capable of industrial application”. The TRIPS did not define what constitutes an invention – thereby allowing Member States to do so –, but enshrines the notions of novelty, inventive step, and industrial applicability (Article 27.1, second part[2]) as the foundation of patents. This means that the restriction (the requirements) is the norm – and only if all are met, a patent shall be granted.

This apparently simple redaction has a profound significance for the very meaning of a patent. The TRIPS Agreement made it clear that an activity of original creation was necessary for a patent to be granted. Always. It could have not mentioned any requirements (and focused on expanding patentability to all sectors), but it does.

Requiring, in particular, inventive activity means imposing that, from a scientific standpoint, there must be a technical difficulty to be overcome. Thus, it cannot be a discovery of something that already existed in nature.

The theoretical concept of inventive activity implies actually restricting the granting of patents, to stimulate competition. A patent cannot be granted if there is no difficulty which was overcome in applied research. Nor should there be a patent when market

[1] While some interests are well-recognized, such as those of industrial sectors, others are often invisible, such as those of patients and researchers and that of users of products produced under patents in general.

[2] Importantly, non-obviousness and utility can also be required (as noted in the footnote of the same article, whose objective was to recognize countries which made reference to these requirements – and only that. It does not equate them to inventive step and industrial applicability).

competition among companies already leads to the threshold for invention and the patent application does not involve any real process of overcoming difficulty. Technological investment, effort, and resource application may be required for an invention, but these are not the main criteria to obtain a patent. The requirement of inventive activity turns the granting of the patent into a true incentive for investment in research and development, by preventing free-riders.

Thus, it can be said that a patent is not the rule but the exception (in the sense of being an exceptional case, since the free flow of knowledge is the rule) that will only be justified if significant inventive activity has been carried out.

The concept of inventive activity and its public understanding can be very useful, for example, to support the protection of so-called traditional knowledge against appropriation by industries or researchers whose greatest effort is to obtain information from native populations about the best uses of certain products, discovered and known by these populations for a long time. Proper application of patentability criteria should find that the traditional knowledge constitutes prior art and hence a patent should not be granted. The concept also serves to limit and restrict patents in sectors where competition itself ensures innovation. In such economic context, inventive activity must be viewed more rigorously, as it is more difficult (or even impossible) to identify a technical difficulty to be overcome, since inventions directly result from comparisons with other products or processes.

Thus, reading Article 27.1, second part allows for a completely different description of the concept of patents compared to the interpretation that many derive from Article 27.1, first part. A patent would

be the exception and not the rule. Accordingly, its attribution could only be admitted in specific sectors (the so-called sectoral recognition of patents) and exceptional circumstances, where a true revolution in the state of the art is required to undertake transformations. Note that this interpretation would have the secondary benefit of directing investments towards sectors most in need of deep technological innovation and not towards those where technological innovation can be and is a product of market competition (and where, therefore, the patent is merely a tool for capturing monopoly profits). Yet, even in such sectors, there might be other circumstances limiting patentability. Patents might not always be the best incentive. Precisely because groundbreaking inventions in crucial sectors are essential and fundamental to both those who need it and for the subsequent development of science, they might also be the ones which need even more stimulus to be widely shared and rendered accessible. In the pharmaceutical sector, new technologies and techniques, such as CRISPR and gene editing therapies, might therefore be necessarily 'open' and not restricted by patent protection. Such an understanding enables more robust patent examination of such technologies (fully endorsed by the TRIPS Agreement) and may lead to their inclusion as non-patentable subject matter.

But it is not only at the time of patent grant that the co-existence of two laws (i.e., the traditional and its alternative), both with express legal grounds, can be observed. Also, at the other essential moment in the 'lifecycle' of patents, the moment of their disappearance, two narratives are possible.

In classic industrial law, the punitive discipline of patents revolves around rules inspired predominantly by privatist principles, such as the nullity of registration and the expiration of patents.

Nullity provisions sanction the non-compliance with material and regulatory provisions in the registration process, while rules regarding patent expiration stem from a fact occurring after the granting of the patent.

Both share the static perspective from which they depart. Precisely because they view the patent as a privilege and therefore focus on the intrinsic and extrinsic requirements for its grant, the revocation of the privilege occurs upon the invalidation of the acts that created the privilege and also even the subsequent disappearance of the conditions that justified it. The logic of privilege tends to concentrate attention on the explicit and implicit conditions for obtaining the privilege, thus focusing on compliance with formal rules. Just as in medieval times, canonists had to develop the rich theory of implicit conditions to allow for the undoing of legal transactions in the face of the rigid rule of binding by expression of will. From this privatist perspective, it is necessary to include new requirements, explicit or implicit and not always justifiable, to challenge patents.

However, a diametrically opposite understanding of the same phenomenon is possible. The competition-based understanding of industrial law simplifies everything. It broadens and makes the discipline public – exactly because it shifts the focus away from the requirements for grant and centers on the discipline of abuse of rights. The patent, like any situation of market power, can lead to abuses, which must be curbed. Industrial law, therefore, includes a specific discipline on abuse of power in this aspect.

This discipline has several implications for patents. On one hand, it is necessary to distinguish those patents that effectively generate monopolistic power. This usually occurs in high-

technology products with a high degree of essentiality for consumers or other producers (such as medicines, for example). In this case, there will clearly be a social function derived from their essentiality. Therefore, there is a duty to supply the products at non-abusive prices.

This inherently competitive-institutional perspective on the matter at hand aligns perfectly with the TRIPS Agreement. Indeed, it provides for the possibility of compulsory licensing in cases of public health emergencies (Article 31(b)). In fact, this provision can also be interpreted as permitting compulsory licensing in situations of market shortages (resulting, among other factors, from monopolistic power). Thus, patent holders are clearly obligated to ensure market supply and non-monopolistic pricing. Failure to comply with such rules results in the breaking of the monopoly through compulsory licensing.

This leads to an intriguing conclusion. Depending on the observer or interpreter of the law, one can describe a universe where patents appear as a classic subjective right granted to any innovator, or its exact opposite, a world without patents, where their granting and permanence is the exception.

Why then does the first narrative prevail so strongly over the second in practice? Here too, as in the previous examples, perhaps the question is as important as its answer. Moreover, it should be noted that in academic circles, voices are adding to the discourse indicating that the patent system is based on access exclusion, and is therefore inconvenient and inefficient for society.[3]

[3] See Joseph Stiglitz, "Prizes, Not Patents", Project Syndicate, Mar. 6, 2007, at <https://www.project-syndicate.org/commentary/prizes--not-patents> (defending a prize system for discoverers instead of patents). Note that this system would have the merit of recognizing and encouraging true inventors instead of rewarding large companies that have the resources to patent a vast range of "inventions" or often mere "discoveries".

Furthermore, recent grim realities like the COVID-19 pandemic have demonstrated the devastating consequences of restrictions on licensing and production of medications by patent holders in terms of loss of human lives.[4]

A Paradigm Shift?

An essay on an ideal world can lead to various conclusions. Developing all of them would exceed the limited scope of this essay. Therefore, I will attempt to outline only two criticisms of the way patent law has been applied, one broader and the other more specific. Then, I will outline some ideas about the general characteristics of a new world without patents.

The first criticism addresses the existence of 'two laws' but the continuous prevalence of only one of them, consistently aimed at protecting structures and interest groups with greater economic power. This is different from the classic opposition between 'law in the books' and 'law in action': in this case, both 'laws' are in the books, but only one is put 'in action'. This indicates a societal understanding by the legal community based on vested economic interests, which is problematic for several reasons. It privileges those groups most benefited by the economic process. However, perhaps the main critique is empirical: historical data suggest that such a societal model has historically been responsible for the inverse distribution of income, poverty, and underdevelopment worldwide, especially in the Global South. It can also be argued that this view fails to capture the significance of social groupings and the elements that give them cohesion, as demonstrated by anthropological studies. These elements, rooted in social and political circumstances, were, before the artificial imposition of the economic rationale (brought

about by the triumph of capitalist civilization), the primary drivers of social cohesion for the vast majority of social groupings in their original form.[5] Therefore, the traditional understanding of the social universe criticized here is capable of generating poverty and social disintegration simultaneously—characteristics that are prevalent in our times.

The second criticism pertains to the existence of these two laws but the unwillingness by us, legal practitioners in academia, the judiciary, legal profession, and public legal careers in general, to apply the other law. This responsibility does not solely rest with legislators, whether captured or independent. The choice between the two laws and the consequent shaping of society is made by all of us, day by day, as we interpret and apply the law. If society is disorganized or unjust, it reveals that we are part of the problem, not the solution.

One word is missing about the proposed 'new world'. What would it be like, how would it function, and what would be its social and environmental effects? Well, the first response is that it's impossible to know because it doesn't exist yet, and because the functioning of theoretical models in social sciences can often be greatly modified by the different forms of organization induced by social forces and the behavior of the individuals involved. In a world without patents (or with few patents) would new forms of domination and concentration of knowledge and power not emerge? Possibly, even probably.

However, we know without a doubt that our current system has led to enormous concentration of power, less availability of fundamental goods and technologies for humanity, and environmental destruction. It has also led to a concentration of the 'advantages' derived from patents in companies rather than the true inventors.

[4] For some empirical data, see GDP's Report on Access to COVID-19 Vaccines (2021), at https://www.direitoepobreza.org.br/files/ugd/81c13c_4a64de6a52bf4008a956b785e2b671ba.pdf.

[5] See M. Godelier, *Au fondement des sociétés humaines* (2007).

A hundred years ago, we knew the names of inventors or scientific discoverers, like Fleming for penicillin. Today, *companies* become renowned for their “inventions”. The concentration of power concentrates knowledge and recognition. Its negative social and environmental effects are known. The incentives, on the other hand, are dubious. As mentioned above, a reward system for the true ‘inventors’, whether individuals or institutions, would likely be more effective as an incentive than the granting of a temporary monopoly over production to a big conglomerate.

Furthermore, if patents remain a true exception, only granted in the case of revolutionary inventions and changes in the state of the art^[6], the capital and investments of companies would be directed exactly towards those sectors lacking such revolutions, rather than those where competition is already sufficient for innovation and the patent is merely a guarantee of extraordinary profit for its holder (the prevalent situation today in most economic sectors). Sectoral and exceptional (rather than unitary), the patent would become more useful for directing resources to sectors where investment is truly needed for innovation and invention.

A new world is therefore possible. But not only that: it is explicitly safeguarded in the TRIPS Agreement, in virtually all countries’ Constitutions, and in legislation more generally. If the old system shows clear signs of exhaustion and leads us to the brink of disaster as a species, the apparent excess of idealism of the new becomes preservationist realism.

Author: Calixto Salomão Filho is Full Professor at the University of São Paulo (USP) Law School.

[6] And even there only if there is not an imposing public need for access to the goods or services derived from the inventions.