
Contents & Abstracts

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■ **Transformation of the Intellectual Property Regime in the Age of AI: Re-designing Legal Frameworks and Intellectual Property Management with a Focus on the Patent System** 2

WATANABE Toshiya

■ **Applicability of Product-By-Process Claims to Trained Models** 6

YAMAMOTO Shunsuke

Contemporary AI services and systems are built upon machine learning technologies exemplified by deep learning, particularly upon trained models developed by such technologies. The significant economic and technological value unique to trained models has created a demand for their protection through patent rights. Accordingly, patent applications have been filed in new claim formats, such as “trained model” and the “process for generating a trained model” defined by the training process. However, the examination guidelines and related materials do not present clear standards for determining whether the former claims are interpreted as product-by-process (PBP) claims, or whether the latter claims are interpreted as inventions of a “process for producing a product.” Without the accumulation of relevant court judgments and appeal decisions, academic discussion on the issue remains underdeveloped.

This paper conducts a detailed study of the interpretation of these claims, taking into account trends in the judgments rendered by the Intellectual Property High Court following the Supreme Court judgments on PBP in 2015. The summary is as follows.

It is appropriate to construe a process for generating a trained model not as an invention of a mere process but as an invention of a process for producing a product.

While a trained model claim formally corresponds to a PBP claim, such a claim is difficult to construe as an “apparent PBP claim” and should be interpreted as falling within the scope of the 2015 Supreme Court judgments. Nevertheless, in view of the technical characteristics of trained models, the existence of impossible or impractical circumstances should be affirmed without requiring arguments or proof from the applicant, and the claim should not be regarded as violating the clarity requirement.

Under the product identity theory, it is generally considered difficult to argue and prove that a trained model generated by a training process different from that recited in the claim has the same structure, characteristics, or other properties.

As a supplementary discussion, this paper also introduces a recent decision of the U.S. Patent Trial and Appeal Board that interpreted claims covering trained models as PBP claims.

■ **Challenges Related to Social Implementation and Monetization of University Inventions**31

OHKUMA Yasuo & HASEGAWA Soichiro

The traditional missions of universities were education and research, to which contribution to society was added by the revision of the Basic Act on Education 20 years ago, in 2006. This was followed by the enactment of the Act to Facilitate Technology Transfer from Universities to the Private Sector in 1998 and the Act on Special Measures for Industrial Revitalization in 1999, as well as the launch of the University Intellectual Property Headquarters Development Project in FY2003 and the incorporation of national universities in FY2004. These developments led to a rise in the number of patent applications filed by universities, spurring startup activity, increasing licensing revenue, and contributing otherwise to applying university research to address social issues. At the same time, challenges continued to be raised in fully exploiting the schemes and opportunities for patenting inventions originating from universities and promoting their social implementation.

In recent years, high expectations are being placed once again on using intellectual property (IP) held by universities, creating more startups, and monetizing IP. As epitomized by the “Startup Development Five-year Plan” approved by the Cabinet in 2022, Japan is pressing forward with startup creation. This has coincided with efforts to improve the environment for IP utilization by universities, including the formulation of the “University Intellectual Property Governance Guidelines” in 2023. Monetization through IP represents a major challenge for universities as well. The “Basic Policies for Economic and Fiscal Management and Structural Reform” approved by the Cabinet in 2006 stipulated reducing operating expenses grants for national universities by 1% annually, compelling universities to secure their own operating and research funds. The “Basic Policy for Reform of National University Corporations and Inter-University Research Institute Corporations” released in November 2025 mentions reviewing the system of operating expenses grants, alongside securing financing through inventorying and valorizing intellectual assets and promoting social implementation and other measures as part of financial strategies comprising management strategies.

Against the backdrop of this growing interest in the utilization of IP of universities, this paper examines the challenges involved in the patenting, societal application, and monetization of inventions originating from universities.

■ **Treatment of AI-Generated Designs Under the Design Act: The Issue of Prior Art**43

AOKI Hiroya

The proliferation of generative AI technologies has brought attention to various intellectual property law issues in recent times. This paper deals primarily with the issue of eligibility of AI-generated designs as prior art under the Design Act. It focuses on whether the disclosure of AI-generated designs (of a kind that are not considered creations of natural persons) will lead to applications for design registration being rejected for subsequent human creations with identical or similar designs, citing lack of novelty or creative difficulty. Some aspects of this issue have already begun to be examined by the Design System Subcommittee.

This paper first considers whether AI-generated designs can constitute prior art under the current law. Specifically, it examines the requirements of “publicly known,” “design,” and “shape or equivalent features or graphic image” relevant to novelty and creative difficulty, and explains that AI-generated designs could satisfy these requirements. As a consequence, with generative AI-related hardware and software both making significant performance improvements these days, AI outputs could make it difficult for humans to obtain design rights, at least in existing design fields.

Building on this discussion, the paper presents that, on the one hand, such a situation could have positive effects, such as allowing a vast number of desirable designs to be disclosed and made usable without involving

design rights, which are exclusive rights. On the other hand, there may be also other logics embodied in the Design Act, and the situation described above does not necessarily lead to only favorable outcomes.

Based on the above considerations, this paper explores several interpretive and legislative options under the Design Act. In particular, regarding application of the exception to the lack of novelty (grace period), which has also been discussed by the Design System Subcommittee, the paper addresses potential application, including existing interpretation theories, as well as the limitations that arise from the use of generative AI.

■ **The Fair and Equitable Sharing of Benefits Arising from the Use of Digital Sequence Information on Genetic Resources in CBD**57

ISOZAKI Hiroji

Despite divergent views between developing and developed countries over the interpretation of the definition of genetic resources and other related matters, a consensus was reached at COP15 on digital sequence information (DSI) in the context of the framework of the Convention on Biological Diversity (CBD). COP decision 15/9 confirmed that the “use of DSI on genetic resources” falls within the definition of the “utilization of genetic resources” in the Nagoya Protocol and may be covered by a benefit-sharing contract. Furthermore, the decision established a multilateral mechanism and the Cali Fund for fair and equitable benefit-sharing within the Kunming-Montreal Global Biodiversity Framework. In addition, decision 16/2 adopted the “modalities for operationalizing the multilateral mechanism” that define its substance. The modalities stipulated include the mechanism’s basic policies and administration, applicable DSI on genetic resources, users in designated sectors with payment obligations, amount and method of payment to the Cali Fund, allocation of funds from the Cali Fund, and procedures for reviewing the multilateral mechanism.

Similar schemes are the legal mechanisms of the multilateral system, standard material transfer agreement, and fund pursuant to the provision of the International Treaty on Plant Genetic Resources for Food and Agriculture. Because the CBD lacks corresponding provisions, use of the multilateral mechanism, payments to the Cali Fund, and conclusion of related contracts are considered voluntary actions by users. On the other hand, the modalities establish measures to encourage and induce voluntary actions as well as procedures to facilitate such actions. In particular, users of DSI on genetic resources (companies) are strongly urged to conclude contracts that include provisions for payments to the Cali Fund in accordance with the multilateral mechanism, with the aim of making such contracts an international standard.

At the same time, the CBD framework has undergone changes with a view to expanding benefit-sharing. By specifying the triggering act for benefit-sharing as the use of DSI, the acquisition of genetic resources from which DSI is derived and the use of DSI (benefit-sharing) have been decoupled. In addition, it was decided that payments would take the form of a fixed-rate contribution based on the economic scale of users, similar to a business tax.

■ **Safeguarding Venetian Glass Technology in The Republic of Venice: A Legal-Institutional Analysis**73

SAWADA Yuki

It is generally understood that the origin of modern patent law lies in the patent system that developed within the Republic of Venice from the 15th century onwards. Under what social circumstances, then, did this patent system emerge? This study focuses on the practical background surrounding the manufacturing techniques of *Vetro di Murano*—widely known today as Venetian glass or Murano glass—a product that remains a hallmark of Italian and Venetian craftsmanship.

Venetian glass served not only as a cultural icon for the Republic but also as a vital export commodity. However, the industry faced two critical challenges that demanded resolution.

First, the production of glass required high-temperature furnaces. Since the urban fabric of Venice consisted primarily of wooden structures, the proliferation of the glass industry and its furnaces posed an escalating risk of catastrophic urban fires. Second, there was the constant threat that highly skilled glassmakers might migrate beyond the Republic's borders. Such emigration risked the dissemination of technical knowledge in foreign lands, thereby undermining the Republic's competitive advantage in the global glass market.

To address these issues, the Venetian government implemented two pivotal measures: (1) the compulsory concentration of high-temperature furnaces on the island of Murano, and (2) the restriction of glassmakers' movement outside the island. While these practices enabled the state to exercise centralized control over technical knowledge, they also gave rise to various institutional tensions.

The purpose of this paper is to elucidate how the tensions generated by these two practices led to the conceptualization of a legal framework—one in which the state, having secured a grasp over technical knowledge, grants inventors the exclusive right to its utilization under specific conditions.

■ Non-Use Rescission of General Retail Service Trademark81

HIRASAWA Takuto

The judgment in *Orné de Feuilles v. Shikoku Railway Company*, 2024 (Gyo-Ke), 10054 (the “Judgment”), appears to be the first judicial decision in which a court ruled on the non-use rescission of a general retail service trademark.

A general retail service trademark defines designated services as “retail services or wholesale services for a variety of goods in each field of clothing, foods and beverages, and livingware, carrying all goods together,” distinguishing it from specific retail service trademarks that cover specific goods. Furthermore, the two are treated differently in that examinations for conflict with goods trademarks (Cross Searches) are not conducted for a general retail service trademark.

Incidentally, in a trial for non-use rescission of a trademark, the trademark will not be rescinded for non-use if it is used for at least part of the designated goods or services concerned in the petition. This also applies to retail service trademarks covering specific goods. Unlike these services, general retail services carry a variety of goods together. The Judgment defined general retail services as “cases in which goods in each field of clothing, foods and beverages, and livingware are carried together at a single establishment, each on a reasonably substantial scale and on a continuous basis” and held that non-use rescission cannot be avoided unless the trademark is used for these services. On this basis, the Judgment upheld the trial decision on rescission for non-use, citing that the foods and beverages had modest sales figures and proceeds.

The criteria adopted in the Judgment differ from the Examination Guidelines for Trademarks, which provide that, for general retail services, sales of clothing, foods and beverages, and livingware should each account for around 10% to 70% of gross sales. However, a prior decision of the Intellectual Property High Court (IP High Court, September 14, 2011, *Hanrei Jiho*, No. 2128, p. 136 [Blue Note]) interpreted the scope of rights and the exclusionary effect of registration of general retail service trademarks restrictively. If that interpretation is presumed, the harm caused by numerous registrations of general retail service trademarks will not be significant, leaving the question of whether trademark use should be judged so strictly.