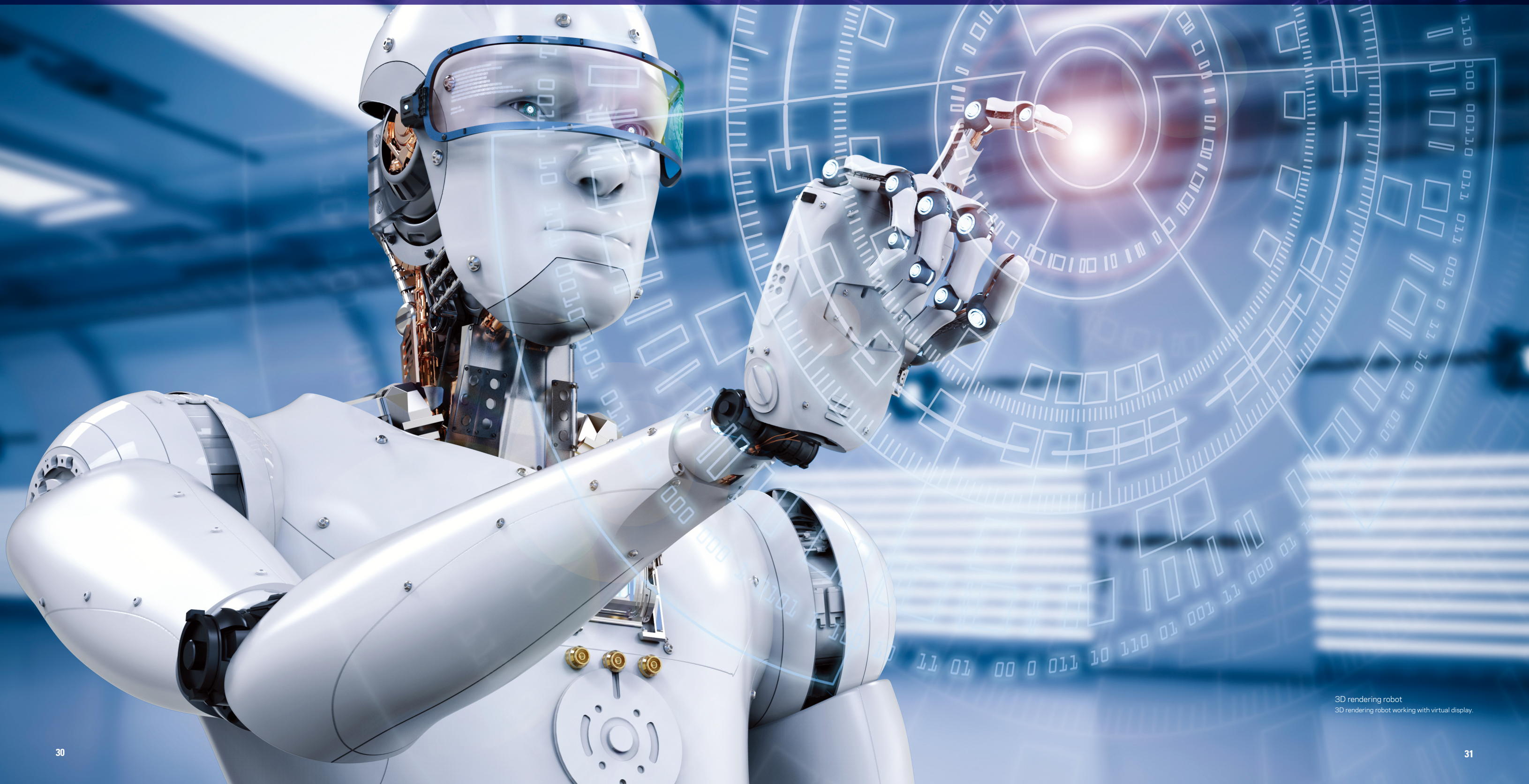


Promoting IP Creation and Utilization

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3D rendering robot
3D rendering robot working with virtual display.

Expanding Patent Big Data Utilization in Industry

Expansion of IP-R&D Centered on Materials, Parts, and Equipment

Patents are generally considered only in the outcome of research and development (R&D). However, IP-based research and development (IP-R&D) utilizes patents as a starting point and guide for R&D. In particular, IP-R&D helps overcome the high barriers to entry of overseas patent and also helps develop alternative technologies.

KIPO began implementing an IP-R&D plan for securing core technologies already known in patents and improving the efficiency of R&D projects. This plan to strengthen R&D consists of three major tasks: expanding IP-R&D programs in public R&D projects; supporting IP-R&D customized to each stage of growth of business; and strengthening the foundation for IP-R&D proliferation in industry, academia, and research.

Big Data Analysis of Patents in Major Industries

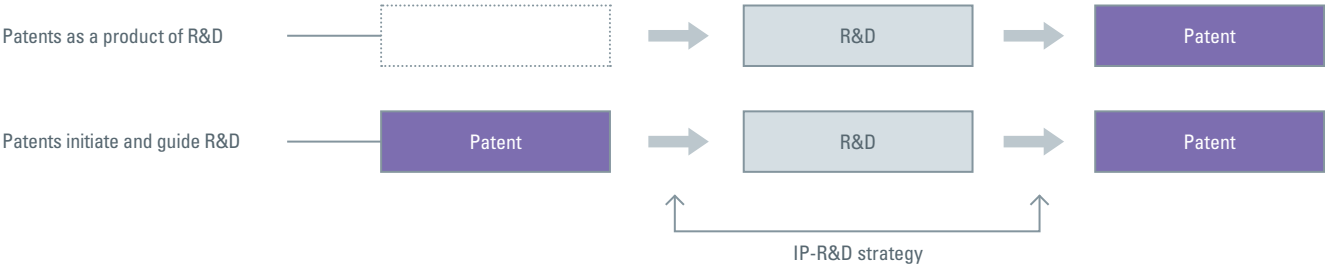
To promote IP-driven innovation on a national R&D system, KIPO implemented policies encouraging the use of patent information in the R&D process. Based on more than 430 million patent-related data, KIPO provided big data analysis results in five major industries, which includes bio-health, display, hydrogen industry, next-generation battery, and system semiconductor, for government R&D planning as well as private R&D.

In particular, throughout all the stages of government R&D system, from planning, assignment, execution, and evaluation,

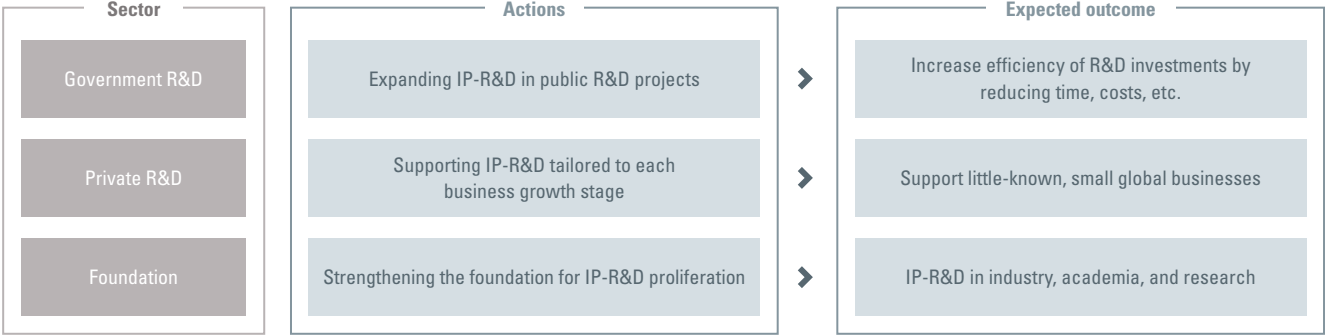
IP-related data analysis will be provided. Specifically, big data analysis on markets as well as technologies will be utilized during the planning stage, and patent experts will be required to participate in the assignment stage leading to the maximization of the efficiency of government R&D.

KIPO plans to expand big data analysis for 27 new major industries and establish technical solutions utilizing big data analysis on patent information for five major social issues, including fine dust, fire suppression, daily radiation, daily supplies, and infectious diseases.

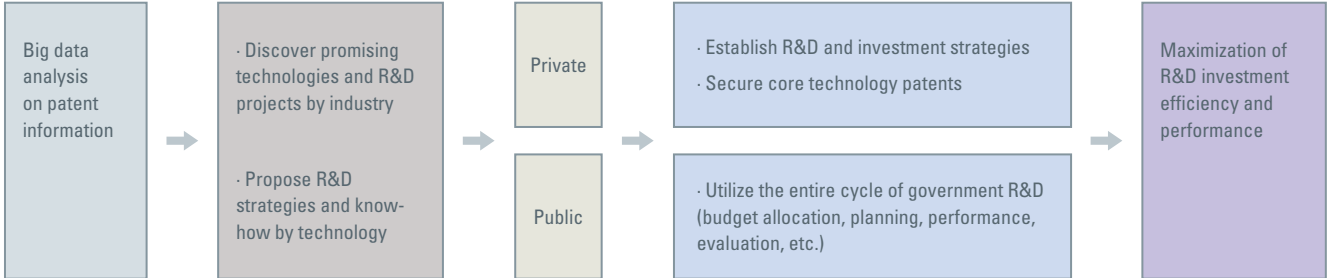
Paradigm Shift of IP-based R&D



Direction of Implementation



Performance Enhancement through R&D Strategies based on Big Data Analysis of Patents



Building the Foundation for Financing Based on IP

One Trillion Won in IP-backed Financial Transactions

IP-backed financing provides a means for companies to procure funds through loans or investments based on their IP assets. In 2019, the total amount of IP-backed financial transactions reached 1.35 trillion South Korean Won (equivalent to 1.11 billion US Dollars) in Korea.

The most common types of IP-backed financing are loans collateralized by IP, loans guaranteed by IP, and IP-based investments. Collateral, guarantees, or loans based on the IP assets of companies utilize “IP valuation” to determine the monetary value of the applicable IP. The valuation of IP can be considered when investing in certain startups or for monetizing IP through IP sales or licensing. Therefore, SMEs and startups with IP assets are more appealing for venture capital fund investments.

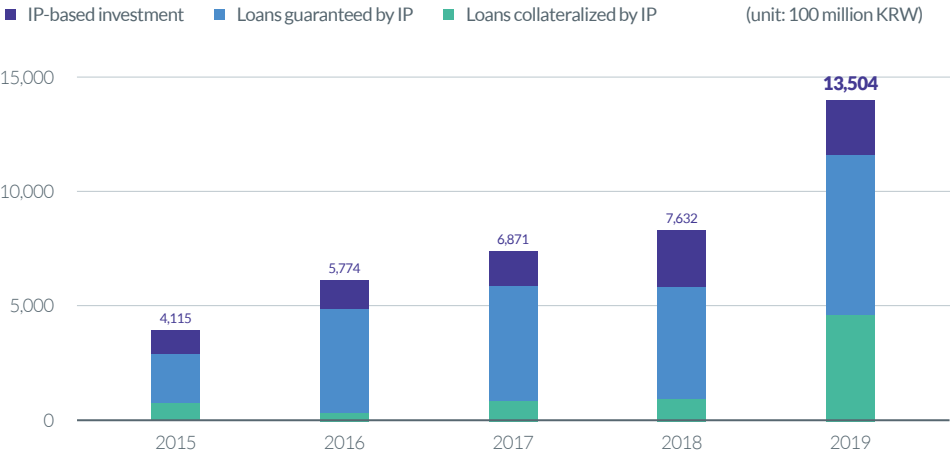
The first loan based on IP was made with the Korea Development Bank (KDB) in 2013, and subsequent transactions

of IP-backed financing have increased steadily. Notably, the overall scale in total transactions increased 77% from that of 2018 to reach 1.35 trillion South Korean Won, which shows a significant growth in IP-backed financing.

To facilitate IP-backed financing, professional IP valuation institutions were designated and subsidized by KIPO to be dedicated to maintaining and enhancing the quality of valuation. Moreover, a recovery institution of IP collateral was implemented for operation beginning in early 2020, which will stimulate IP-backed financing by purchasing the defaulted IP asset from commercial banks.

Last but not the least, KIPO plans to focus on raising awareness of IP management as financial assets and promoting the expansion of IP-backed financial transactions in order to help the growth of SMEs and startups based on their innovative IP assets.

Progress of IP-backed Financing in Korea



Launch of the Patent Mutual Aid Program

KIPO implemented the Patent Mutual Aid program as a policy program to provide a stable financial base for alleviating the costly burden of IP disputes and advancement into overseas markets. The program serves as a precautionary measure through mutual aid among SMEs when funds are needed to resolve domestic and overseas disputes related to IPRs or for securing IPRs abroad. In August 2019, a “Patent Mutual Aid Center” began operating after the Korea Technology Finance Corporation (KIBO) was selected as the agency to entrust the mutual aid program.

The main service products of the Patent Mutual Aid program consist of installment savings (similar to bank savings), IP sector loans (similar to bank loans), and business stabilization loans. Similar to an installment savings service at a commercial bank, a company will decide the option of depositing any amount from 300,000 won to 10 million won per month for up to a maximum of 500 million won in an account.

When joining the mutual aid program, an SME will select a service product from a range of monthly installment amounts and payment periods. After one year of maturity, the company is permitted to receive a loan for the costs of litigation related to their IPRs or an overseas patent application, and the loan can be repaid in installments.

Subscribing companies may also be eligible to receive a higher interest rate than general installment savings services and/or additionally receive funding support based on their installment saving when needing a loan for management stabilization, IP lawsuit, or overseas patent applications. Furthermore, companies that participate in programs of KIPO or use guarantees of KIBO may qualify for preferential benefits when applying for KIPO policy projects, such as a credit line increase, a guarantee rate reduction, legal consultations, or additional points.

KIPO will continue to expand the program so that the Patent Mutual Aid program can become a reliable financial precaution for SMEs.

Structure of the Patent Mutual Aid Program

