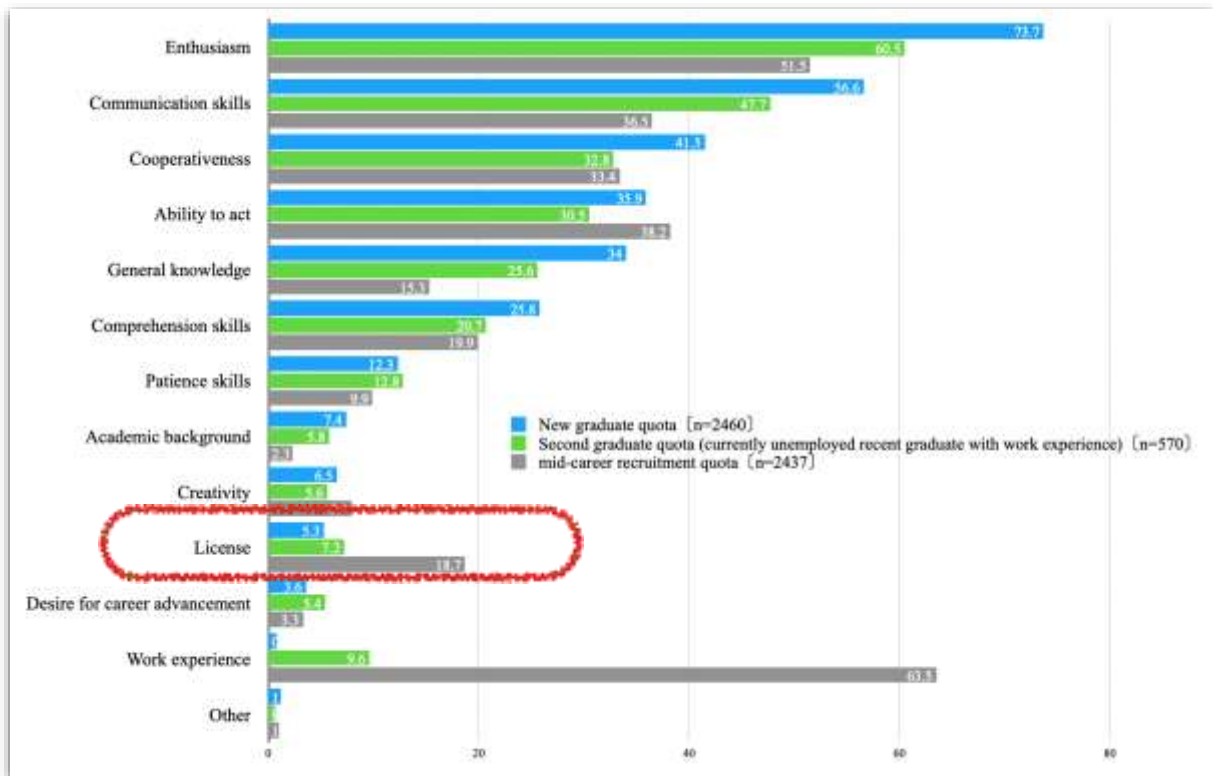


**The Importance of Intellectual Property Management Technician for
Japan's economic growth**

I . Introduction

In recent years, Japan has established 280 qualification systems based on laws and regulations. In addition, 26 systems and 173 projects based on Certification System for Civilian Technician Examination Projects. And according to another theory, the 2009 edition of Jiyu Kokumin-sha's "Complete Book of National Examinations and Qualifications" indicates that there are 1,249 national qualifications in Japan, excluding some qualifications (The Japan Institute for Labour Policy and Training, 2010, P.49). In such a situation, people who want to work tend to think about what kind of qualification they need to obtain to earn a stable income. With the collapse of the bubble economy, the collapse of Lehman Brothers, the changing demographic structure, and the recent economic changes caused by the spread of COVID-19 infections, the job market has become unclear, and some people may want to gain a slight advantage over others by obtaining such qualifications (Hori, 2021, P.74-78). In fact, the Japan Institute for Labour Policy and Training's "Fact-finding Survey on the Recruitment and Hiring of Young People by Companies" found that companies consider qualifications to be important in the hiring process for 5.3% of new graduates, 7.2% of second graduates, and 18.7% of mid-career workers. From this data, It can be seen that the importance of qualifications to job seekers is a factor that cannot be ignored. (Kouno, 2013, P.177-188), (The Japan Institute for Labour Policy and Training, 2008, P.9-10)

【figure.1】 Items that are emphasized in corporate recruitment and selection



- The survey was conducted under the condition that up to three multiple answers were allowed.

- Unit : %

- The Japan Institute for Labour Policy and Training, Survey Series No. 43: Survey on recruitment and hiring of young people in companies Compiled from Chart 1.9

As these data show, the existence of qualifications is likely to be recognized as useful in professional life in Japan. However, as indicated earlier, with more than 1,000 qualifications, it is possible to develop a debate about which qualifications are more profitable for workers. Therefore, in order to examine the importance of the national qualification "Intellectual Property Management Technician" in the society, which is the theme of this paper, it is necessary to clarify the potential and characteristics of this qualification. It needs to be

clarified whether this national qualification is just for the state to give workers the right to use the qualification name or whether it is worth more than that. In this paper, it will clarify the meaning of the name, the profession, and the profession backed by the law of intellectual property management technician by comparing it with other qualification that also deal with intellectual property such as patent attorney.

II . What is the professional technician system in Japan?

First of all, what is the meaning of the term "technician" in the name of Intellectual Property Management Technician? Technician, that is also called certified skilled worker, are certified by the Japanese government as professionals in a variety of professions, and there are a total of 130 different types of national qualifications, including intellectual property management technicians. (Ministry of Health, Labour and Welfare, 2020, List of Trade Skills Tests Occupations), (Ministry of Health, Labour and Welfare, 2021, A Step Toward the Future), (Ministry of Health, Labour and Welfare, 2020, About the Trade Skills Test System) This category of national qualifications, called technicians, are supported by a law called the Vocational Ability Development Promotion Law. The following is the part of the law that defines a technician.

< Excerpt from the Vocational Ability Development Promotion Act >

Chapter V. Trade Skills Tests

(Trade Skills Tests)

Article 44 (1) The Minister of Health, Labour and Welfare gives trade skills tests which are classified into grades specified by Order of the Minister of Health, Labour and Welfare and classified into occupations specified by a Cabinet Order (hereinafter referred to as "trade skills tests by occupation" in this Article); provided, however, that the minister may give

trade skills tests which are specified by Order of the Ministry of Health, Labour and Welfare as those not suitable for specific classification, without specifying the classes.

(Title of Persons Who Passed the Examination)

Article 50 (1) A person who passed a trade skill test may refer themselves as a certified skilled worker. ※

※ Certified skilled worker (Article 50 (1)) means technician on this paper.

• Adapted from “Digital Agency, Vocational Ability Development Promotion Act, e-Gov

Law Search”

Thus, Article 44 and Article 50 of the Vocational Ability Development Promotion Act provide the basis for the establishment of these technicians. On the other hand, the question remains, what is the mission of the Technician as a national qualification. In order to understand this, it is necessary to delve deeper into the Vocational Ability Development Promotion Act, which is the basis of this law. The following is an excerpt from the law that corresponds to the purpose of the law.

Vocational Ability Development Promotion Act

Chapter I. General Provisions

(Purpose)

Article 1 The purpose of this Act, together with the Employment Countermeasures Act (Act No. 132 of 1966), is to promote the development and improvement of the abilities of workers needed for their jobs, by taking the measures in a comprehensive and systematic manner for enriching the contents of vocational training courses and vocational abilities tests for the smooth implementation of thereof and the measures for securing the opportunities for

workers to voluntarily receive education and take training courses relate to their job or vocational abilities tests, and thereby to ensure job security and improve the status of workers, as well as to contribute to the economic and social development as a whole.

• Adapted from “Digital Agency, Vocational Ability Development Promotion Act, e-Gov

Law Search”

As a result, the Vocational Ability Development Promotion Act was enacted to develop and improve the skills of workers in order to stabilize their employment and improve their status, and the technician system was established as part of this law.

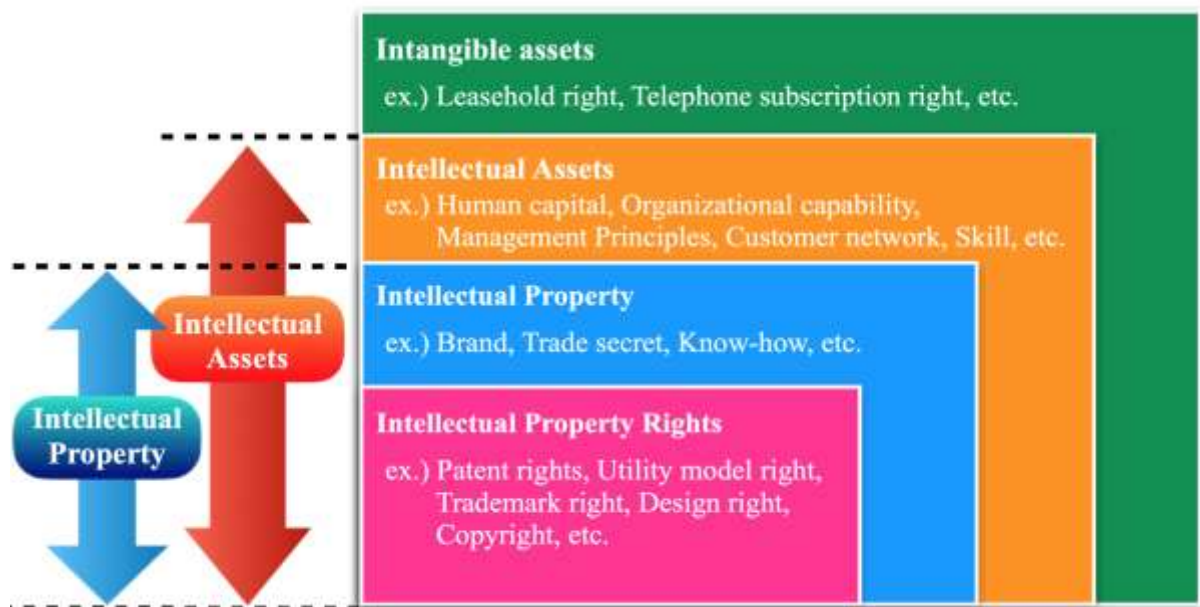
For this reason, unlike patent attorneys, who are given the exclusive right to represent clients in applying for intellectual property rights, intellectual property management technicians are involved in the management of intellectual property and the planning of internal policies as a member of a company or organization. In other words, in the same way that an object that is just a piece of paper or a small piece of metal takes on the value of money when the government gives it the meaning of credit, a worker who has the ability to operate a certain amount of intellectual property is given credit by the government which gives that worker a competitive edge in the market.

But, why does the government certify the Intellectual Property Management Technician and other technician systems? The purpose of the technician system is to "contribute to the development of the Japanese economy and society," as stated in the end of Article 1 of the Vocational Ability Development Promotion Act. In other words, intellectual property management technicians are expected to contribute to the economic and social development of the nation as a whole by promoting the process of value creation in the companies and organizations to which they belong.

III. What is intellectual property? And how is it created?

As mentioned earlier, if the Intellectual Property Management Technician is one of the 130 types of technicians who specialize in intellectual property, it is necessary to clarify the type of intellectual property. The following is a classification chart of intellectual property and intellectual assets.

【figure.2】 Image of classification of intellectual property rights, intellectual property, intellectual assets, and intangible assets



assets recorded on the balance sheet, but are viewed as all the formless management resources owned by the company.

- Adapted from “Ministry of Economy, Trade and Industry. (2020). What are Intellectual Assets and Intellectual Asset Management?”

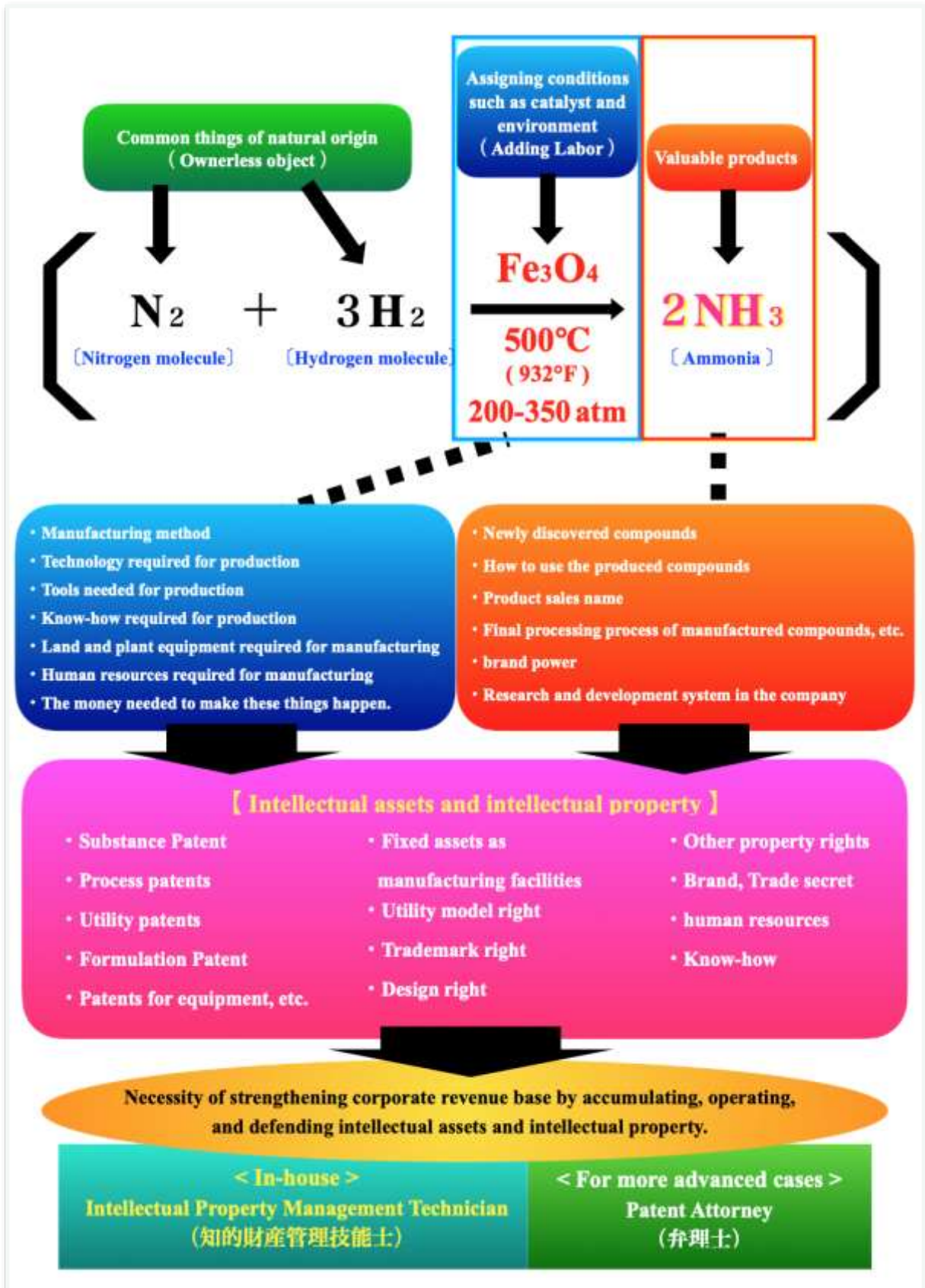
As shown in the figure above, in Japan, various laws protect these rights by law, and the owner of the rights can profit from them. Intellectual property, like tangible property, can be monopolized under certain conditions. However, because it is immaterial, they require different skills than those required for the management of tangible property rights at each stage of property recognition, creation, management, monetization, and protection. In this sense, an Intellectual Property Management Technician is a guide, a guardian, and a keeper of the money tree called intellectual property. In Japan, where resources are particularly limited, it is expected that intellectual property management technicians will be required to play an even more active role in the future in order to promote society.

IV. What does it mean to create intellectual property?

As has been made clear thus far, intellectual property is property that does not have a form. So how can this creation of incorporeal property be realized? In the first place, property that can be sold to generate money is considered to be created by combining the factors of production, capital and labor. Now, it is necessary to clarify the types of incorporeal property with new value that is created by adding labor. The following figure shows the various types of incorporeal property derived from the example of the Haber-Bosch chemical process, which is also taught in high school science.

【figure.3】 An example of incorporeal value creation process using the Haber-Bosch

chemical process (Matsuda, 2018)



In the past, these German scientists, Haber and Bosch, made a revolutionary invention to improve the efficiency of food production by making it easier to obtain the raw materials for nitrogen fertilizer from the mundane gas nitrogen and hydrogen. (Matsuda, Kazuo, 2018) The important point here is that by adding the labor to the ownerless intangible materials such as nitrogen and hydrogen, we are producing something beneficial to mankind. Such newly discovered manufacturing methods and products are protected by the government for a certain period of time as intellectual property rights, including patents, in accordance with prescribed procedures. This is an example of a process of value and property creation, born by human hands from something that exists universally in the world.

So, what is the concept of labor that is required to generate this intangible property and intellectual property. According to Tamura (2021) introduced, Kant's idea of possession is that "Possession is necessary in order to be able to compound one's own will to the object in order to affect this world. And as a result, that person will be able to achieve further prosperity." (Tamura, 2021, P.9) From Kant's argument, we can see that when people create tangible and intangible property, such as content and qualifications, with the aim of gaining prosperity, there is a process of compounding their will, thoughts, ideas, and information into these raw materials they have.

This act of "compounding one's will, thoughts, ideas, information, etc., into a medium that one holds in one's hands" is itself a part of the function of labor, and the quality of that labor depends on how much skill one possesses. In particular, the Intellectual Property Management Skills Test is a system by which the government objectively evaluates the level of skills required in the process of creating intellectual property. The existence of this process of labor and value production is the reason why there is a need for a group of experts called Intellectual Property Management Technician who are well versed in this field and certified

by the government. And as a force for economic revitalization, this system will become more important to the country and, by extension, to its sovereign citizens.

V. Conclusion

The process of creating something more valuable by adding different elements to things that exist universally in the world, is a human activity that has been repeated many times in the history of mankind since ancient times. Some of the Greek philosophical ideas discovered by Plato, Aristotle, and others eventually led to attempts at alchemy, which aimed to create precious metals from base metals. And even though it did not fulfill the original goal of creating gold for those who aspired to alchemy at that time, it eventually led to great discoveries related to human life and life sciences such as modern chemistry, pharmacy, and any other sciences. With the history of these intellectual pursuits, it can be said that invention and innovation are inseparable from the state of humanity and the development of civilization. How can something new and valuable be created? In response to this question, the economist Schumpeter (1883-1950) wrote in his book, "The Theory of Economic Development".

"To produce is to combine the various things and forces available to us. To change the product and the method of production is to change the combination of these things and forces." (Yoshimura, 2015, P.2-3)

Schumpeter used the term "new combination" to describe this law of value creation, and it can be said that he is showing what business person should do in various corporate activities and value creation. Today, there are more than 110,000 intellectual property management technicians, a group of in-house professionals who are responsible for the value

creation, protection and operation of intellectual property. (Association of Intellectual Property Education, 2021) And this system has the potential to become a guidepost for companies to strengthen their profitability in the chaotic Japanese economic market. Therefore, this group of experts will be required to play a more active role in the future economic recovery of Japan.

References

- Association of Intellectual Property Education. (2021.12). Number of intellectual property management technicians in Japan, National Examination: Intellectual Property Management Skills Test, Retrieved December 23, 2021, from <http://www.kentei-info-ip-edu.org>
- Digital Agency, Vocational Ability Development Promotion Act, e-Gov Law Search, Retrieved December 17, 2021, from https://elaws.e-gov.go.jp/document?lawid=344AC0000000064_20191214_501AC0000000037
- Hori, Yukie. (2021). The Effect of COVID19 Infection Spread on the Employment of New College Graduates, Japanese Journal of Labor Research, 63(4), P.74-78, Retrieved December 16, 2021, from <https://ci.nii.ac.jp/naid/40022535852/>
- Kansai Bureau of Economy, Trade and Industry. (2020). Recommendations for Intellectual Property Management, Retrieved January 2, 2022, from https://www.kansai.meti.go.jp/2giki/chitekishisan/chiteki_top.html
- Kouno, Takako. (2013). Relationship between the qualification as communication skills in the modern society and motivation in the job hunting (1), Hiroshima Shudo University Essays, 53-2, P.177-188, Retrieved December 16, 2021, from https://shudo-u.repo.nii.ac.jp/?action=pages_view_main&active_action=repository_view_main_item_detail&item_id=2009&item_no=1&page_id=13&block_id=62
- Matsuda, Kazuo. (2018). Making Bread from Air -A Story of Ammonia-, Tsukuba Science News, Retrieved December 23, 2021, from

<http://www.tsukuba-sci.com/?column01=空気からパンを作る%E3%80%80～アンモニアの話～>

Ministry of Economy, Trade and Industry. (2020). What are Intellectual Assets and Intellectual Asset Management?, Retrieved December 18, 2021, from https://www.meti.go.jp/policy/intellectual_assets/teigi.html

Ministry of Health, Labour and Welfare. (2020). About the Trade Skills Test System, Retrieved December 17, 2021, from https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/koyou_roudou/jinzaikaihatsu/ability_skill/ginoukentei/index.html

Ministry of Health, Labour and Welfare. (2020). List of Trade Skills Tests Occupations (130 types), Retrieved December 17, 2021, from https://www.mhlw.go.jp/content/ginoukenteisyokusyuu_ichiran.pdf

Ministry of Health, Labour and Welfare. (2021). A Step Toward the Future - A Sure Certification - 2021 Trade Skills Tests for All Grades Exam Guide, Retrieved December 16, 2021, from <https://www.mhlw.go.jp/content/000484341.pdf>

Ministry of Health, Labour and Welfare. (2021). A Step Toward the Future - A Sure Certification - 2021 Trade Skills Tests for Students Exam Guide, Retrieved December 16, 2021, from <https://www.mhlw.go.jp/content/000484342.pdf>

Ministry of Economy, Trade and Industry. (2020). What are Intellectual Assets and Intellectual Asset Management?, Retrieved January 2, 2022, from https://www.meti.go.jp/policy/intellectual_assets/teigi.html

Tamura, Yoshiyuki. (2021). *Frontiers of Intellectual Property, Volume 1: The Present and Future of Academic Research*, Chapter 1, II, 3, P.9, Retrieved November 20, 2021, from

The Japan Institute for Labour Policy and Training. (2008). *Survey on the recruitment and employment of young people in companies*, Survey Series No.43, Chapter 2, 1-4, P.9-10, Retrieved December 16, 2021, from

https://www.jil.go.jp/institute/research/2008/documents/043/043_01.pdf

The Japan Institute for Labour Policy and Training. (2010). *Analysis of Occupational Qualifications in Japan -From the Web Qualifications Survey-*, Labor Policy Research Report No.121, Chapter 2. *Current Status and Trend of Occupational Qualifications*, 1(2), P.49, Retrieved December 16, 2021, from

https://www.jil.go.jp/institute/reports/2010/documents/0121-1_02.pdf

Yoshimura, Hiroshi. (2015). *Innovation Management: Thinking about the Meaning of Innovation - Using "New Combination" and "Design" as Clues*, Daiwa Institute of Research Important Theme Report Management Consulting Division, P.1-11, Retrieved December 23, 2021, from

https://www.dir.co.jp/report/consulting/vision/20150320_009568.pdf