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Council for Trade-Related Aspects of Intellectual Property Rights

WOMEN AND INTELLECTUAL PROPERTY

COMMUNICATION FROM AUSTRALIA, THE EUROPEAN UNION, JAPAN, SWITZERLAND, THE SEPARATE CUSTOMS TERRITORY OF TAIWAN, PENGHU, KINMEN AND MATSU, THE UNITED KINGDOM, AND THE UNITED STATES OF AMERICA

1 INTRODUCTION

- 1. Intellectual property (IP) is an important factor in the success and growth of a business, particularly of small and medium sized enterprises (SMEs). IP protection helps businesses find partners, secure funding, and commercialize inventions. Finding investors and forming partnerships often depends on having IP rights to a technology or product, especially for technology-oriented start-ups. Many lenders and investors view patent ownership or having a patent application pending as an important factor in funding decisions: patent holders are more likely to receive financing from venture capitalists and typically receive funding more quickly than entrepreneurs who do not hold patents. Furthermore, patents have also been linked to greater market value among established businesses. Research shows that women engage in the IP system less than men. Therefore, higher involvement of women-owned businesses in IP, i.e., a higher rate of obtaining patents and other IP protection among women-owned businesses, could help women both establish their businesses and maximize revenue and success. In addition, more ideas and entrepreneurship opportunities by women provide society with the benefit of diverse contributions from a wider array of perspectives and untapped talent. Enabling women to play an equal role in the economy is essential to sustained economic growth and achieving gender equality, and will help lift millions out of poverty.
- 2. Women's participation in the IP system varies according to the type of IP. For example, a study in the US found that of the different types of IP, trademarks, and copyrights are the most common among both women- and men-owned businesses, with only minimal gender differences in copyright holdings (4.3% of women employers and 4.5% of men-owned businesses held a copyright).⁵ In terms of patents, however, men-owned businesses are twice as likely as women-owned businesses to have either a granted patent (1.5% compared with 0.7%) or a pending patent application (0.9 % compared with 0.4%).⁶
- 3. Various studies have looked at women's participation in patenting and have attempted to account for the gender disparity. Educational and occupational choices are two important influences. Historically, science and engineering fields produce the most patentable inventions, so when fewer women pursue careers in science and engineering fields, they will make up a smaller share of patent

¹ World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property (CDIP). (2018). CDIP/21/12 REV. https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_21/cdip_21_12_rev.pdf
² Institute for Women's Policy Research. (2018). *Innovation and Intellectual Property Among Women Entrepreneurs*. https://iwpr.org/wp-content/uploads/2020/10/C472_Report-Innovation-and-Entrepreneurship-9.6.18-clean.pdf.

³ *Id*.

⁴ World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property (CDIP). (2018). CDIP/21/12 REV. https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_21/cdip_21_12_rev.pdf
⁵ Institute for Women's Policy Research. (2018). *Innovation and Intellectual Property Among Women Entrepreneurs*. https://iwpr.org/wp-content/uploads/2020/10/C472_Report-Innovation-and-Entrepreneurship-9.6.18-clean.pdf.

⁶ *Id*

⁷ US Patent and Trademark Office (USPTO) Office of the Chief Economist. (2019). *Progress and Potential, A profile of women inventors on U.S. Patents.* https://www.uspto.gov/sites/default/files/documents/Progress-and-Potential.pdf

inventors.⁸ However, at least one study suggested there are other reasons for the lower rate of patenting by women than there simply being fewer women in science and engineering.⁹

- 4. There has been some progress in the rate of women's participation in patenting. Between 1998 and 2017, the proportion of female inventors worldwide almost doubled from 6.8% to 12.7%. ¹⁰ Further, the proportion of patent applications that name a woman amongst their inventors rose from 12% to 21% over the same period. ¹¹ A study by the World Intellectual Property Organization (WIPO) analysing patent applications filed using the Patent Cooperation Treaty (PCT) system found that the country with the fastest improvement in gender participation was Mexico, followed by Spain, Poland and Switzerland. ¹² Mexico's share of international patent applications with women inventors increased from 7.8% in 1995-99 to 25.8% in 2011-15. ¹³ Spain, Poland, and Switzerland saw a similar increase in the share of international patent applications with women inventors. ¹⁴ Another study found that the highest levels of female patenting rates have been in biotechnology, pharmaceuticals and organic chemistry, with women contributing to the inventions of approximately half of the patent applications made in these fields between 1998-2017. ¹⁵ In addition, one study has shown that women are more likely to patent in academic institutions than in corporate or government environments. ¹⁶
- 5. While the noted progress is encouraging, the continued gender disparity in patenting suggests that more can be done to facilitate inventorship and patenting by women.

2 INTERNATIONAL APPROACHES

- 6. A 2013 report prepared by the United Nations Conference on Trade and Development (UNCTAD) discusses the challenges faced by women entrepreneurs.¹⁷ It aims to start a dialogue with policymakers about how to support increased innovation in women-owned firms in both developing and developed economies, and generate gender-aware policies and concrete improvements in programmes targeting women's empowerment.¹⁸
- 7. During the 2015 TRIPS Council discussion of women and innovation, ¹⁹ the World Bank noted work being done to support women innovators, such as the Caribbean Women Innovators Network, and studies on this issue, such as the World Bank's "Gender Equality and Development" report and the "Women, Business and the Law" report²⁰.
- 8. In November 2018, the Committee on Development and Intellectual Property (CDIP) of WIPO adopted a decision on women and IP acknowledging the importance of incorporating a gender

⁸ *Id*

⁹ Institute for Women's Policy Research. (2018). *Innovation and Intellectual Property Among Women Entrepreneurs*. https://iwpr.org/wp-content/uploads/2020/10/C472_Report-Innovation-and-Entrepreneurship-9.6.18-clean.pdf.

¹⁰ United Kingdom Intellectual Property Office. (2019) *Gender profiles in worldwide patenting, An analysis of female inventorship.*

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/846363/Gender-profiles-in-worldwide-patenting-2019.pdf$

¹¹ *Id*.

¹² Martinez, G.L., Raffo, J., Saito, K.; (2016). *Economic Research Paper No. 33, Identifying the Gender of PCT Inventors*. World Intellectual Property Office.

https://www.wipo.int/edocs/pubdocs/en/wipo_pub_econstat_wp_33.pdf

¹³ *Id.*

¹⁴ *Id*.

¹⁵ United Kingdom Intellectual Property Office. (2019) *Gender profiles in worldwide patenting, An analysis of female inventorship.*

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/846363/G ender-profiles-in-worldwide-patenting-2019.pdf

¹⁶ Id.
17 United Nations Conference on Trade and Development. (2013). A Survey on Women's
Entrepreneurship and Innovation. https://unctad.org/webflyer/survey-womens-entrepreneurship-and-innovation-2013

¹⁸ Id

¹⁹ WTO TRIPS Council, Minutes of Meeting, 24-25 February 2015, IP/C/M/78Add.1

²⁰ International Bank for Reconstruction and Development / The World Bank. (2021). *Women, Business, and the Law 2021*. https://openknowledge.worldbank.org/bitstream/handle/10986/35094/9781464816529.pdf

perspective into IP policies.²¹ As a result, WIPO held a series of sessions dedicated to women's participation in the IP system.²² The first session tackled some of the barriers women face when entering the invention and innovation space, such as lack of access to resources, including financial and knowledge resources; limited exposure to role models due to under-representation of women in science, technology, engineering, and math (STEM) fields, as well as other IP-generating fields; lack of understanding of the value of IP rights; and discrimination, bias, sexism, and socio-cultural norms and expectations, among other factors.²³

- 9. The second session looked at initiatives that bring together different stakeholders including governments, private sector, universities, and civil society organizations each with different expertise and reference groups, to design and implement solutions to bridge the gender gap in IP.²⁴ The third session of this series will look at good practices in IP service delivery, design, and analysis, and WIPO is inviting offices, teams, and practitioners to share examples of good practices.²⁵
- 10. CDIP has been particularly active on the issue of closing the gender gap in IP. Among other work, it has issued a proposal in July 2021 for continued consideration of the issue, ²⁶ a document containing a Summary of the Study on "Policy Approaches to Close the Intellectual Property Gender Gap Practices to Support Access to the Intellectual Property System for Female Inventors, Creators and Entrepreneurs" and a "Report on Women and IP: Compilation and Sharing of Data". ²⁸

3 NATIONAL APPROACHES

- 11. The patent system promotes innovation and encourages investment, economic growth, knowledge sharing, and the efficient use of resources. It rewards inventors for the time, effort, and ingenuity invested in creating new products and processes, and society benefits from the disclosure of the information in patents. Further, previous literature finds that patents, and potentially other IP, can be important factors in investors' decisions. IP can lead to greater start-up capital for a business, which can help set a business on the right path for greater success overall.
- 12. The co-sponsors would be interested in an exchange on Members' experiences regarding approaches to promote participation by women entrepreneurs in the IP ecosystem, such as 29,30 :
 - a. Providing customized workshops, seminars, or awards for women entrepreneurs to raise awareness of the benefits that the IP system may hold for them;
 - b. Providing support in the form of assisting applicants with patent searches and facilitating free or lower-cost legal assistance;
 - c. Providing loans or other funding from both private and public sector targeted towards women's innovation;
 - d. Establishing peer exchanges, mentoring, and other training groups focused on IP for women entrepreneurs;
 - e. Preparing reader-friendly IP material, including patent and trademark basics, examination overviews, information on patent searching and resources on legal assistance that could

 $^{^{21}}$ World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property (CDIP). (2018). CDIP/22/16 REV2.

https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_22/cdip_22_16_rev_2.pdf

²² https://www.wipo.int/women-and-ip/en/news/2021/news 0008.html

²³ https://www.wipo.int/women-and-ip/en/news/2021/news_0005.html

²⁵ https://www.wipo.int/women-and-ip/en/news/2021/news_0008.html

World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property (CDIP). (2021). CDIP/26/10 REV. https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_26/cdip_26_10_rev.pdf
World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property

²⁷ World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property (CDIP). (2021). CDIP/26/INF/3. https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_26/cdip_26_inf_3.pdf

World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property (CDIP). (2021). CDIP/26/7. https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_26/cdip_26_7.pdf

²⁹ United Nations Conference on Trade and Development. (2013). *A Survey on Women's Entrepreneurship and Innovation*. https://unctad.org/webflyer/survey-womens-entrepreneurship-and-innovation-2013

³⁰ World Intellectual Property Organization (WIPO) Committee on Development and Intellectual Property (CDIP). (2021). CDIP/26/INF/3. https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_26/cdip_26_inf_3.pdf

- be used by all inventors and entrepreneurs, and raising awareness about the availability of such resources;
- f. Promoting initiatives that encourage women to participate in STEM education, and promoting participation and retention of women in STEM career fields; and
- g. Creating targeted programmes for the training of women for IP law and administration careers.

4 CONCLUSION

13. Women entrepreneurs, creators, and innovators are a growing segment of the population, and their active participation is key to achieving gender equality. Encouraging their participation in the IP system can open doors to financing, growth of a business, and further opportunities, and also benefits society in knowledge sharing and fostering innovation. More can be done to support and empower women in participating in the IP ecosystem.

5 GUIDING QUESTIONS

- 1. Does your country have specific programmes to assist or promote women's participation in the IP system?
- 2. What measures, if any, have proven useful for the support of women entrepreneurs in participating in the IP system? Are there measures you have tried which have not been useful?
- 3. How can the awareness of women entrepreneurs be raised regarding the benefits of IP for their business activity?
- 4. According to the experience of Members, what are the main challenges and specific barriers for women entrepreneurs in your country?
- 5. According to the experience of Members, are there specific sectors where you have found women entrepreneurs are particularly active and could benefit from participating in the IP system?