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KEI MATSUMOTO* / CHRISTOPH RADEMACHER**/ AYAKO SUGA***

Protecting IP Licenses and Jointly Owned IP in the Age of COVID-19: Insolvency and Force Majeure Events under Japanese Law

This article provides an overview and discussion of a multitude of issues that are relevant for IP licensing under Japanese law. The authors recap the results of the legislative process that predominantly addressed the IP licensee's position in the case of a licensor's insolvency, including the 2020 amendment to the Japanese Copyright Act, and examine whether a comprehensive reform of IP licensing regulations in Japan would be preferable to also offering better protection to trademarks, trade secrets and data licensees. Given that Japanese companies often agree on jointly owning IP generated in the process of software development and other co-development projects, we analyze the risks of joint ownership compared to non-exclusive licenses. To further illustrate such risks that may be even more significant in cross-border constellations, we conduct a comparative study on the actions that a party commissioning the development of new software can take without obtaining the software developer's consent under Japanese, US and German patent and copyright law. Furthermore, we examine certain unresolved issues that may arise in the case of a party's insolvency or the impact of *force majeure* events, and provide suggestions on how to address these when drafting and negotiating IP license agreements.

I. Introduction

In the age of COVID-19, many companies are even more concerned than usual about how to protect their licensed intellectual property (IP) in the event of their licensing counterparty's insolvency or other force majeure events that might interfere with the license.

Japan amended its Copyright Act last year to offer protection to licensees in the event of a licensor's insolvency by allowing a licensee to assert a copyright license against a person who acquires copyright in the work. The amendment has changed the landscape for negotiating IP license agreements in Japan. It may also have an impact on, for instance, the tendency of Japanese companies to jointly own IP generated in the process of software development or other transactions.

Based on our experience in drafting, negotiating and handling disputes arising from IP license agreements, we believe this amendment provides a good opportunity for companies to revisit their positions in existing IP license agreements and to reconsider how to negotiate future IP license agreements that involve Japanese IP. This article provides some advice in this respect for both IP owners and IP users. Now that the Copyright Act offers protection to the licensee in the event of the licensor's insolvency, a company using another company's IP may prefer to rely on a license rather than jointly owning the IP, which can often be unpredictable in relation to how the parties can utilize the IP in the future.

While we think that it is worth considering how a licensor may be affected by a licensee's insolvency or by force majeure events that may interrupt the licensee's business, most of the legislative discussion in Japan over the last three decades has focused on the protection of licensees. In Parts II to IV, we recap the results of these discussions and look at the licensee's position in the event of the licensor's insolvency.

Part II discusses how various types of IP can be licensed under Japanese law and the situations in which a licensee may assert its license in the event of the licensor's insolvency. Japanese law treats IP licensing differently depending on the type of IP. The analysis in Part II highlights an inconsistency of approaches across different IP legislative schemes, and – in light of the recent reform of the Copyright Act – raises the question of whether a comprehensive reform of all IP laws in Japan is required to ensure the appropriate protection of IP licensees in the event of insolvency or other unforeseen events.

Part III discusses certain grey areas that remain in relation to the continuation of a license in the event of the licensor's insolvency: exclusivity of the license, sublicensing rights, licensor's obligations of specific performance, as well as the situation in case of cross licenses and patent pools.

As noted, Japanese companies often jointly own IP generated in the process of software development or other transactions. Part IV discusses how joint ownership of IP in software development agreements may be unpredictable compared to a non-exclusive license, especially when the IP covers multiple jurisdictions. To highlight differences

* Attorney-at-law (Japan and New York) at a law firm in Tokyo, LL.M. from Northwestern University School of Law.
** Professor of Law , Waseda University School of Law.
*** Attorney-at-law (Japan) at a law firm in Tokyo, LL.M. in Law, Science and Technology from Stanford Law School.

across certain key jurisdictions, we compare the actions that a client of a software development agreement can take without obtaining permission from the software vendor under the laws of Japan, the US and Germany. We also consider the situation where a client is a joint owner of the IP as well as where a client obtains only a non-exclusive license under both copyright and patent law.

In Part V we consider the licensor's position in the event of a licensee's insolvency, and in Part VI we examine how a licensee and licensor are protected in the event of a force majeure event and how each party can draft an effective force majeure clause in a license agreement under Japanese law.

II. Licensee's position in the event of licensor's insolvency

1. General principles under Japanese insolvency laws

Japanese law provides for four types of insolvency proceedings: bankruptcy proceedings (*hasan-tetsuzuki*), civil rehabilitation proceedings (*minji-saisei-tetsuzuki*), corporate reorganization proceedings (*kaisha-kousei-tetsuzuki*), and special liquidation proceedings (*tokubetsu-seisan-tetsuzuki*).[1] The aim of bankruptcy proceedings and special liquidation proceedings is the liquidation of a debtor's assets – i.e. paying creditors as much of the outstanding debts as possible by converting the debtor's assets into money. In contrast, civil rehabilitation proceedings and corporate reorganization proceedings are 'restructuring' processes that aim to restructure and revitalize the debtor's business.

The type of insolvency proceedings determines who will manage the liquidation or restructuring process. The court appoints a trustee to lead *bankruptcy* proceedings and a liquidator to administer *special liquidation* proceedings. In *civil rehabilitation* proceedings, the management of the debtor corporation (rehabilitation debtor) may continue to operate the business and manage the restructuring process (i.e., DIP (debtor in possession)) unless the court appoints a trustee because:

- the management is inappropriately managing or disposing of the properties, or
- it is otherwise necessary for the rehabilitation of the debtor corporation.[2]

In contrast, the court appoints a trustee to lead the *corporate reorganization* proceedings, and the director of a debtor corporation cannot continue to operate the business or manage the restructuring process.[3]

In special liquidation proceedings, the liquidator has no right to choose whether to cancel or perform a license agreement.[4] Therefore, a license agreement will continue to have effect even if one of the parties becomes insolvent.

However, in bankruptcy proceedings, civil rehabilitation proceedings and corporate reorganization proceedings, the trustee or rehabilitation debtor[5] may choose to either cancel or perform an executory bilateral contract – contracts for which neither party has fully performed their contractual obligations.[6] A license agreement will be considered to be an executory bilateral contract unless the licensee has already paid all royalties or the license is granted for free and without any obligation on a licensee.

Therefore, whether a license agreement will continue to have effect in the event of a party's insolvency depends on the structure of the license. In most cases, the trustee will be able to decide whether to continue an agreement. However, in a case where a licensee is entitled to assert rights under the license agreement against a third party, the trustee will not have the right to choose whether to cancel or perform the license agreement. Therefore, the license agreement will continue to have effect even after one party has become insolvent.[7]

Whether the other party may assert the license agreement against a third party will depend on the type of IP that is being licensed under the agreement. In Japan, industrial property rights such as patents, utility models, designs and trademarks must be registered with the Japan Patent Office (JPO). Copyright and trade secrets cannot be registered with the JPO or any other government body.[8] Databases cannot be protected by copyright or other IP rights, but they can be the subject of license agreements. The next section discusses how each of these types of IP can be licensed under Japanese law and when a licensee may assert its license in the event of the licensor's insolvency.

2. Patent licenses

a) Categories and nature of patent licenses

In Japan, a patent license falls into one of the following three categories: (i) a (registered) exclusive license (*senyo-jisshiken*); (ii) an exclusive ordinary license (*dokusenteki-tsujo-jisshiken*); and (iii) a non-exclusive ordinary license (*hi-dokusenteki-tsujo-jisshiken*).[9]

1 Hasan-hō [Bankruptcy Act], Act No 75 of 2 June 2004 (Bankruptcy Act) (bankruptcy proceedings); Minjisaisei-hō [Civil Rehabilitation Act], Act No 225 of 22 December 1999 (Civil Rehabilitation Act) (civil rehabilitation proceedings); Kaishakōsei-hō [Corporate Reorganization Act], Act No 154 of 13 December 2002 (Corporate Reorganization Act) (corporate reorganization proceedings); Kaisha-hō [Companies Act], Act No 86 of 26 July 2005 (Companies Act) (special liquidation proceedings).

2 Civil Rehabilitation Act, art 64.

3 Corporate Reorganization Act, arts 67 and 72.

4 See n 6. The Companies Act does not contain any equivalent provision allowing the liquidator to choose whether to cancel or perform a bilateral contract.

5 We refer to 'trustee' as long as there is no substantive difference between the position of a trustee in bankruptcy proceedings or corporate reorganization proceedings and the position of a rehabilitation debtor in civil rehabilitation proceedings.

6 Bankruptcy Act, art 53(1); Civil Rehabilitation Act, art 49(1); Corporate Reorganization Act, art 61(1).

7 Bankruptcy Act, art 56; Civil Rehabilitation Act, art. 51; Corporate Reorganization Act, art. 63.

8 While copyright itself cannot be registered, the following information can be registered with the Agency for Cultural Affairs under the Chosakuken-hō [Copyright Act], Act No 48 of 6 May 1970 (Copyright Act): (i) the true name of an author of an anonymous or pseudonymous work (art 75); (ii) the date of first publication or the date first made public of a work (art 76); (iii) date of creation of a computer program (art 76-2); (iv) transfer (other than inheritance or other general succession) of copyright, its alteration as a result of a trust or a restriction on its disposal (art 77(i)); (v) establishment, transfer, alteration or expiration of a pledge on a copyright or restriction on its disposal (art 77(ii)); (iv) print rights (art 88).

9 Tokkyo-hō [Patent Act], Act No 121 of 13 April 1959 (Patent Act) regulates only (registered) exclusive licenses and ordinary licenses: Patent Act, arts 77 and 78. In practice, ordinary licenses are granted on an exclusive basis (i.e., exclusive ordinary license) or on a non-exclusive basis (ie, non-exclusive ordinary license).

A registered exclusive license has a broad scope and effect – even the patent owner will be prohibited from using the patented invention unless the licensee grants an ordinary license to the patent owner. A registered exclusive license also grants the licensee the same rights as the patent owner with respect to seeking injunctive relief[10] and damages[11] in case of infringement. An exclusive license is effective only upon registration with the JPO.[12] An application for registration must be jointly filed by the patent owner and the exclusive licensee.[13] Furthermore, termination of a registered exclusive license becomes effective only if it is registered with the JPO.[14] Even if the license agreement is terminated or has expired, a registered exclusive license will continue to have effect until the patent owner and the registered exclusive licensee jointly file an application to register the lapse of the license with the JPO and the registration is complete. Patent owners and licensees are often hesitant to use the registered exclusive license system because of these procedural requirements.

An ordinary license does not need to be registered with the JPO to be effective and is in principle granted on a non-exclusive basis.[15] In practice, however, a patent owner can also grant an ordinary license on an exclusive basis by expressly stating this in the license agreement.[16] That being said, an exclusive ordinary license, compared to a registered exclusive license, only imposes on the licensor an obligation not to grant a license to other third parties, and the licensee will not be able to seek an injunction against third-party infringers.[17]

To better understand the differences between the three types of patent licenses in Japan we refer to table 1 that shows the legal remedies available to licensees against infringers.

Before 2011, the Patent Act provided that a licensee could assert an ordinary license (whether exclusive or not) against a third party that acquired the licensed patent (new patent owner) after the grant of the license only if the license had been registered with the JPO. To encourage more widespread use of the license registration system, the Japanese government amended the Patent Act in 2007 and 2008 to remove certain requirements for registration.[18] Patent license registrations did not increase in response to these amendments,[19] and so in 2011 the government again amended Art. 99 of the Patent Act to enable a licensee to assert an ordinary license – whether registered with the JPO or not – against a third party that acquired the licensed patent after the grant of the ordinary license. The amendment also abolished the registration system for ordinary patent licenses.

b) Patent licensor's insolvency

As discussed above, Japanese insolvency laws provide that a trustee cannot cancel a license agreement that provides a licensee with rights that can be asserted against a third party.[20] This means that any type of patent license agreement will continue to have effect even when a licensor becomes subject to insolvency proceedings. A licensee may assert a registered exclusive license against a third party that acquires a patent after the grant of the exclusive license.[21] Further, following the 2011 amendment of the Patent Act, an ordinary licensee may assert such a license (whether exclusive or not) against a third party that acquires a patent after the grant of the license. Therefore, a licensor's trustee will not be able to cancel a patent license agreement regardless of the type of agreement, and the agreement will continue to have effect even in the event of the licensor's insolvency.

That being said, there are a number of unresolved issues remaining in the context of a licensor's trustee assigning a patent to a third party. For example, there are different views[22] as to whether all of a licensor's obligations under a license agreement will automatically be transferred to a new patent owner (royalties, confidentiality, etc.). This is particularly controversial in the case of an exclusive ordinary license. As noted above, the exclusive nature of an ordinary license is not granted by the Patent Act but by a mutual agreement. While an ordinary licensee may assert the license against a new patent owner and continue to use the patented technology, this does not mean the licensee can prohibit the new patent owner from granting an ordinary license to a third party. Similarly, the licensor's specific performance obligation – for example, an obligation to provide technical information necessary to use a patented invention – does not automatically transfer to the new patent owner. We discuss these issues in Part III below.

3. Utility model licenses and design licenses

In Japan, a utility model right is effective upon registration with the JPO in accordance with the Utility Model Act, and a design right is effective upon registration with the JPO in accordance with the Design Act.[23] Both Acts adopt the same approach as the Patent Act in terms of the grant of licenses and the assertion of licensed rights

10 Patent Act, art 100.
11 Patent Act, art 102.
12 Patent Act, art 98(1)(ii).
13 Patent Registration Order, art 18.
14 Patent Act, art 98(1)(ii).
15 Patent Act, art 78(2).
16 Nobuhiro Nakayama, *Tokkyohō* [*Patent Law*] (4th edn, Kobundo 2019) 544.
17 An exclusive ordinary licensee is not entitled to an injunction against an infringer, see eg Osaka Chihō Saibansho [Osaka District Court], 20 December 1984, Sho 57(Wa)7035. As for damages, the Intellectual Property High Court has held that the right to seek damages provided in art 102(1), (2) and (3) Patent Act applies *mutatis mutandis* only to exclusive ordinary licensees, see Chitekizaisan Kōtō Saibansho [Intellectual Property High Court], 11 March 2009, Hei 19 (Ne) 10025.
18 In 2007, the Japanese government introduced a 'specified ordinary license registration system' so that cross licenses could be registered without the JPO referring to individual patent numbers. In 2008, the Patent Act was amended so that only limited information on a license agreement would be published on its registration; for a recap of the amendment and related discussion see Shunji Matsuda, *Raisensu keiyaku-hō – torihiki jitsumu to hōteki riron no hashiwatashi* [*The Laws of License Agreements and Related Transactions: Bridge between Transaction Practice and Legal Theory*] (Yuhikaku 2020) 43.
19 442 registrations in 2007, 560 in 2008, 269 in 2009, 499 in 2010, and 419 in 2011. See JPO, 'Patent Administration Annual Report 2013' (Statistics, Information Edition) 82 <https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00552020&tstat=000001024636> accessed 31 January 2021.
20 Bankruptcy Act, art 56; Civil Rehabilitation Act, art 51; Corporate Reorganization Act, art 63.
21 Nakayama (n 16) 541.
22 See discussion in Part III below.
23 Ishō-hō [Design Act], Act No 125 of 13 April 1959 (Design Act); Jitsuyōshinan-hō [Utility Model Act], Act No 123 of 13 April 1959 (Utility Model Act). Unregistered designs may be protected under the Copyright Act or the Fuseikyōsōbōshi-hō [Unfair Competition Prevention Act], Act No 47 of 19 May 1993 (UCPA), and may be licensed to third parties. However, these licenses will not be protected under the Design Act in the event of the licensor's insolvency.

Table 1. Legal Remedies for Patent Licensees

		Injunction	Damages
Registered Exclusive Licensee		Yes	Yes
Ordinary Licensee	Exclusive	No	Yes, but patent law applies *mutatis mutandis*.
	Non-exclusive	No	No

Source: Prepared by authors

against third parties. Therefore, all utility model license agreements and design license agreements will continue after a licensor becomes subject to insolvency proceedings. The 'unresolved issues' discussed above in relation to patent licenses also apply to utility model licenses and design licenses.

4. Trademark licenses

a) Categories and nature of trademark licenses

In Japan, a trademark right is effective upon registration with the JPO in accordance with the Trademark Act.[24] While the Trademark Act adopts the Patent Act approach to the grant of licenses, the two acts differ in terms of the assertion of licensed rights against third parties. The Trademark Act provides for three categories of trademark licenses: (i) a (registered) exclusive license (*senyo-shiyoken*); (ii) an exclusive ordinary license (*dokusenteki-tsujo-shiyoken*); and (iii) a non-exclusive ordinary license (*hi-dokusenteki-tsujo-shiyoken*).

As discussed above, a registered exclusive license has a broad scope and effect – even a trademark owner will be prohibited from using a trademark unless the exclusive licensee grants a license to the trademark owner. The grant of a registered exclusive license becomes effective only upon registration with the JPO. In Japan, registered exclusive licenses are rarely used in relation to trademarks.

An ordinary trademark license does not need to be registered with the JPO to be effective and is in principle granted on a non-exclusive basis.[25] In practice, however, a trademark owner can grant an ordinary license on an exclusive basis by expressly stating so in the license agreement. If an ordinary license is granted on an exclusive basis, it is the licensor's contractual obligation not to grant a license to others and to refrain from invoking any protection under the Trademark Act.

The Trademark Act provides that a licensee may assert an ordinary license (whether exclusive or not) against a third party that acquires the licensed trademark after the grant of the license only if the license has been registered with the JPO.[26] If a licensee wishes to register its license with the JPO, it is important that the license agreement expressly provides for the licensor's obligations to register the license upon execution of the agreement and upon renewal of the licensed trademark,[27] and to cooperate with the licensee in the registration process. In the absence of such express provisions, the licensee cannot require the licensor to register the license.[28]

The 2011 Patent Act amendment noted above could have been extended to cover trademark licenses as well. However, the government decided at that time to not amend the Trademark Act for two reasons: (i) unlike in the area of patent licensing, the practice of trademark licensing usually does not involve multiple licenses, making it less burdensome to fulfill the registration requirements; and (ii) compared to an ordinary patent license, an ordinary trademark license imposes more restriction on the third party who acquires the licensed trademark, because the trademark may no longer function as an indication of source and quality if an existing licensee is already using the trademark.[29] However, ordinary trademark license registrations have not increased since the government's decision not to amend the Trademark Act in 2011.[30] In our view, the reasons for the government's decision do not reflect the reality of recent trademark licensing practice. For example, we are seeing more companies collaborating with other brands and marketing on different platforms, which typically requires the grant of multiple non-exclusive trademark licenses, vertically and horizontally, whether express or implied. It would be burdensome and costly for both the trademark owners and the licensees to be required to register their license every time they make such an arrangement. On the other hand, it should not be difficult for a third party to conduct due diligence on how a trademark has been licensed to other companies and how such companies actually use the trademark. In the age of the internet, companies can easily search online to determine how a trademark is being used in relation to specific goods and services and who is offering such goods and services (if offered as part of a legitimate business). Such facts would also affect the valuation of the trademark (or the entire business or assets to be acquired, including the trademark), which is why most companies trying to acquire a trademark from an

24 Shōhyō-hō [Trademark Act], Act No 127 of 13 April 1959 (Trademark Act). Unregistered trademarks may be protected under the UCPA, and may be licensed to third parties. However, such a license will not be protected under the Trademark Act in the event of the licensor's insolvency.

25 Trademark Act, art 31(2).

26 Trademark Act, art 31(4).

27 An ordinary trademark license can be registered only for the then current term of the trademark (ie, 10 years from trademark registration). If the license term exceeds the then current term of the trademark, the parties must file for an extension of the license registration upon renewal of the trademark.

28 The Supreme Court has held that an ordinary patent licensee may not require the licensor to register the license in the absence of an express agreement to do so, see Saikō Saibansho [Supreme Court], 20 April 1973, Sho 47 (O) 395.

29 2011 Amendment (2011 No 63 Regulation) Official Explanation, 29 <https://www.jpo.go.jp/system/laws/rule/kaisetu/h23/document/tokkyo_kaisei23_63/01syou.pdf> accessed 31 January 2021.

30 201 registrations in 2010, 119 registrations in 2011, 102 registrations in 2012, 121 registrations in 2013, 129 registrations in 2014, 106 registrations in 2014, 85 registrations in 2016, 186 registrations in 2017, 98 registrations in 2018, and 88 registrations in 2019. See JPO, 'Patent Administration Annual Report 2020' (Statistics, Information Edition) 73 <https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00552020&tstat=000001024636> accessed 31 January 2021.

insolvent company would conduct due diligence. Based on the foregoing, we consider that it would be reasonable to afford additional protection to a trademark licensee in the event of the licensor's insolvency.

b) Trademark licensor's insolvency

In the event of a licensor's insolvency, a trademark license agreement will continue to be valid if the license has been registered with the JPO.[31] Therefore, the licensor's trustee will not be able to cancel the license agreement. However, the licensor's trustee can choose to cancel a trademark license agreement that has not been registered with the JPO if the trustee deems that this is in the best interest of the creditors.

c) Trademark license not registered

If a trademark license has not been registered with the JPO and the licensor becomes insolvent, a licensee can request the licensor's trustee to give a 'definite answer' as to whether the trustee intends to cancel or perform[32] the license agreement within a 'reasonable period' specified by the licensee.[33] In bankruptcy proceedings, a licensor's trustee is deemed to have cancelled a license agreement if they do not give a definite answer within a reasonable period.[34] However, in civil rehabilitation proceedings and corporate reorganization proceedings, a licensor (rehabilitation debtor) or a licensor's trustee would be deemed to have waived the right to cancel a license agreement if they do not give a definite answer within a reasonable period.[35]

A decision by the Tokyo District Court illustrates the importance of requesting a 'definite answer' from the management of a licensor that was subject to civil rehabilitation proceedings.[36] The licensee requested the Court to uphold the license after the new management of the licensor had cancelled a trademark license agreement. The Court found that the license agreement was an executory bilateral contract – even though the licensee had paid the minimum royalties for the entire term of the license agreement – because the licensee would potentially still be obliged to make additional payments if certain sales targets were met. However, the Court held that the licensor had waived its right to cancel the license based on correspondence between the licensee and the management of the licensor at the time, which took place after the court ordered the commencement of civil rehabilitation proceedings.

If a licensor's trustee cancels a license agreement, the licensee may seek damages as a bankruptcy creditor.[37] If any consideration previously provided by a licensee to the licensor still remains in the bankruptcy estate, a licensee may demand the return of such consideration. If such consideration no longer exists in the bankruptcy estate, a licensee can exercise its rights over the value of the consideration as a 'holder of claim on the estate'.[38] A holder of claim on the estate may receive payment for the claim from the bankruptcy estate at any time without going through bankruptcy proceedings.[39] If a licensee has prepaid royalties for part of the remaining term of the license agreement,[40] it should be able to demand the return of such royalties as the holder of claim on the estate.

A licensee may also claim damages other than prepaid license fees. That said, it is not entirely clear to what extent a licensee can seek such damages as a bankruptcy creditor – damages such as potential loss of profits can be difficult to specify. In any event, a licensee may only seek damages through regular bankruptcy proceedings and the claim will be subordinate to those of holders of 'rights of separate satisfaction' or 'claims on the estate'.[41]

5. Plant variety licenses

In Japan, a plant variety right becomes effective upon registration with the Ministry of Agriculture, Forestry and Fisheries (MAFF) in accordance with the Plant Variety Protection and Seed Act.[42] Previously, the Act adopted the same approach as the Trademark Act in relation to the grant of licenses and the assertion of licensed rights against third parties: a licensee may assert an ordinary license against a third party that acquires the licensed plant variety right after the grant of the license only if the license has been registered with the MAFF.[43] However, the Plant Variety Protection and Seed Act has been amended so that a licensee may assert an ordinary plant variety license against a person who acquires the plant variety right.[44] This amendment passed the Japanese Diet on 2 December 2020 and will take effect on 1 April 2021.[45] The 'unresolved issues' discussed above in relation to patent licenses also apply to plant variety licenses.

31 Following the same general principles of Japanese insolvency laws discussed above in relation to patent licenses.
32 The licensor's trustee may choose to perform the licensor's obligations and request the licensee to perform its obligations under the license agreement. This option only applies to bilateral contracts, so the licensor must first perform all of its obligations before it can request the licensee to perform all of its obligations.
33 Bankruptcy Act, art 53(2); Civil Rehabilitation Act, art 49(2); Corporate Reorganization Act, art 61(2).
34 Bankruptcy Act, art 53(2).
35 This difference stems from the purpose of each insolvency proceedings. Bankruptcy proceedings are considered to be 'liquidation proceedings', so the default rule is to liquidate the debtor's business. Civil rehabilitation proceedings and corporate reorganization proceedings are 'restructuring proceedings', so the default rule is to continue the debtor's business. See Matsuda (n 18) 176.
36 Tokyo Chihō Saibansho [Tokyo District Court], 11 September 2014, Hei 25 (Wa) 1084.
37 Bankruptcy Act, art 54(1); Civil Rehabilitation Act, art 49(5); Corporate Reorganization Act, art 61(5).
38 Bankruptcy Act, art 54(2); Civil Rehabilitation Act, art 49(5); Corporate Reorganization Act, art 61(5). For a definition of 'holder of claim on the estate' and 'claim on the estate' see Bankruptcy Act, art 2(6) and (7) respectively.
39 Bankruptcy Act, art 2(7).
40 If the licensee had prepaid the royalties for the remaining term, the trustee would not be able to cancel the license agreement, unless the licensee was subject to other obligations.
41 Bankruptcy Act, art 2(9) and art 65(1). A holder of a 'right of separate satisfaction' is a person who holds a special statutory lien, pledge or mortgage against property that belongs to the bankruptcy estate at the time of commencement of bankruptcy proceedings, and who may exercise its rights without going through bankruptcy proceedings.
42 An unregistered plant variety may be protected under the UCPA and may be licensed to third parties. However, such licenses will not be protected under the Shubyō-hō [Plant Variety Protection and Seed Act], Act No 83 of 29 May 1998, in the event of the licensor's insolvency.
43 Plant Variety Protection and Seed Act (before 2020 amendment), art 32(3).
44 Plant Variety Protection and Seed Act (after 2020 amendment), art 32-2.
45 Shubyō-hō no ichibu wo kaisei suru hōritsu [Amendment to the Plant Variety Protection and Seed Act], Act No 74 of 2 December 2020.

6. Copyright licenses

In Japan, the legal framework for copyright licenses is different from that of patent licenses and trademark licenses. Copyright becomes effective upon the creation of a 'work', and does not require registration with the JPO or any other government body. The Copyright Act provides that a copyright owner may grant a license to a third party, but does not specify different categories of licenses, such as an exclusive license or non-exclusive license. A copyright license becomes effective upon grant under a copyright license agreement.[46] The grant of a license cannot be registered with the JPO or other government body. Therefore, any provisions under a copyright license – such as those relating to the degree of exclusivity – are only contractual obligations.

Previously, the Copyright Act did not address whether a licensee could assert a copyright license (whether exclusive or not) against a third party that acquired a licensed copyright after the grant of the license. Therefore, a licensee could not assert its license in the event of a licensor becoming insolvent or the copyright being assigned to a third party. However, in the light of an increase in the bankruptcy of copyright owners and software vendors,[47] the Copyright Act has been amended so that a licensee may assert a copyright license against a person who acquires copyright in the work. This amendment passed the Japanese Diet on 5 June 2020 and took effect from 1 October 2020.[48] Therefore, a licensee now is able to assert a copyright license against a third party that acquires the licensed copyright after the grant of license.[49] A licensor's trustee similarly is no longer able to cancel a copyright license agreement, and a license agreement will continue to have effect even in the event of the licensor's insolvency.

7. Trade secrets licenses

a) Nature of trade secrets licenses

In Japan, confidential information such as know-how may be protected as a 'trade secret' under the Unfair Competition Prevention Act (UCPA). Protection under the UCPA as a trade secret is available upon creation as long as the information is useful, not publicly known and is kept secret.[50] However, a trade secret cannot be registered with a government body. The owner of a trade secret has the right to seek an injunction and damages against any unauthorized use of the secret.

The UCPA is silent when it comes to the grant of trade secrets licenses. While a trade secrets license can be granted by an agreement between parties, it cannot be registered with a government body. Rather, a trade secrets license is a contractual right of the licensee to use a trade secret, and a contractual obligation of the licensor not to exercise its rights under the UCPA to prohibit the licensee from using the secret. A trade secrets license can be granted on an exclusive or non-exclusive basis, but again, this exclusivity is merely a contractual obligation of the licensor.

b) Trade secrets licensor's insolvency

Japanese law does not address whether a licensee can assert a trade secrets license against a third party that acquires the licensed trade secrets after the grant of the license. Therefore, the licensor's trustee can choose to cancel or to perform the license agreement in the event of the licensor's insolvency.

However, a third party acquiring the licensed trade secrets may not be able to prohibit a licensee's continued use of the secrets. This is because such use is unlikely to constitute an act of unfair competition under the UCPA – that is, a misappropriation of trade secrets. Assuming the licensee has lawfully obtained disclosure of the licensed trade secrets by the licensor,[51] it would not be in breach of the UCPA unless it used the trade secrets for the purpose of 'wrongful gain' or 'causing damage to the owner' of the secrets.[52] If a licensor was to assign licensed trade secrets to a third party (without the licensee's consent) and the licensee continued to use the trade secrets as originally permitted under the license agreement, we believe that the continued use of the secrets would not generate 'wrongful gain' or cause damage to the owner of the secrets. Therefore, even if the licensee is not able to assert its non-exclusive trade secrets license against such a third party, the risk of it being subject to an action for 'misappropriation' under the UCPA by a new owner of the trade secrets is remote.

In the light of the recent trend to protect inventions as trade secrets, we will now consider whether additional protection should be afforded to trade secrets licensees in the event of a licensor's insolvency, similar to that provided under the Patent Act. An obvious difference

46 Under Japanese law, a license agreement is valid without any documentation. In practice, however, documentation is essential to prove the existence of the license agreement and its terms.

47 Agency for Cultural Affairs, 'Summarization of Issues Concerning the Introduction of a Countermeasure System for Rights to License Works, etc. – Related Matters to be Considered' (*Agency for Cultural Affairs*) <https://www.bunka.go.jp/seisaku/bunkashingikai/chosakuken/license_working_team/h30_01/pdf/r1406847_05.pdf> accessed 31 January 2021.

48 Chosakuken-hō oyobi puroguramu no chosakubutsu ni kakaru tōroku no tokurei ni kansuru hōritsu no ichibu wo kaisei suru hōritsu [Amendment to the Copyright Act and the Act on Special Provision on the Registration of Works of Computer Programming], Act No 48 of 5 June 2020.

49 The amendment will have retroactive effect and apply to copyright license agreements executed prior to, but existing on or after 1 October 2020. Supplementary Provisions to the amended Copyright Act, art 8. This was also the case with the 2011 amendment of the Patent Act which allowed all patent licensees to assert a license against third parties without registration.

50 UCPA, art 2(6).

51 If the licensee was (or should have been) aware of any intervening wrongful acquisition, use or disclosure when it acquired the trade secrets, the acquisition and use of such trade secrets would breach UCPA, art 2(1)(v) or (viii). Even if the licensee was not aware of such intervening wrongful acquisition or disclosure when it acquired the trade secrets, using such trade secrets after it became (or should have become) aware of the wrongful acquisition or disclosure would breach UCPA, art 2(1)(vi) or (ix).

52 UCPA, art 2(1)(vii). Out of the 25 court decisions since 2008 concerning 'wrongful gain' or 'causing damage to the owner' of the trade secrets, a court has only once found that the requirements were not met – the plaintiff in that case permitted the defendant to use the trade secrets without any restriction (Tokyo Chihō Saibansho [Tokyo District Court], 20 November 2014, Hei 25 (Wa) 25367). Most of the cases relate to an employee using or disclosing trade secrets of a former employer for a new employer or company. There are two cases where a licensee was the defendant, but in both cases the 'wrongful gain' was obvious because the licensee disclosed the trade secrets to a third party in breach of the license agreement (Tokyo Chihō Saibansho [Tokyo District Court], 9 February 2017, Hei 26 (Wa) 1397, Hei 27 (Wa) 34789), or the licensee continued using the trade secrets after the license agreement was cancelled by the licensor because the licensee did not pay the royalty when it was due (Tokyo Chihō Saibansho [Tokyo District Court], 3 February 2011, Hei 21 (Wa) 34931)). There are no court decisions that relate to a licensee continuing to use trade secrets after the license agreement was cancelled by the licensor due to the licensor's insolvency – that is, due to no fault of the licensee.

between a patent license and a trade secrets license is that a patent licensee may benefit from the license without any act of disclosure by the licensor,[53] while a trade secrets licensee would not be able to benefit from the license unless the licensor actively disclosed the trade secrets to the licensee. As outlined above, the Patent Act allows a licensee to assert a patent license against a third party that acquires a patent after the grant of the license, but does not automatically transfer a licensor's obligation for specific performance, such as an obligation to provide the technical information necessary to use the patented invention. Therefore, in our view, it would not provide much additional benefit to trade secrets licensees if the government was to afford the same protection available to patent licensees.

If a licensor becomes insolvent *before* disclosing trade secrets to the licensee, the licensee would not be able to rely on a continued obligation for specific performance and could therefore not require the licensor or a third party that acquires the trade secrets to disclose them. In this situation, it would make more sense for the licensee to cancel the license agreement and seek the refund of any fees already paid to the licensor.[54]

If the licensor becomes insolvent *after* disclosing the trade secrets to the licensee, the licensee would be able – subject to the payment of ongoing royalties, if any – to continue using the trade secrets without breaching the UCPA. Further, even if the licensor's trustee cancels the license agreement and sells the trade secrets to a third party, the third party would not be able to prohibit the licensee from continuing to use the trade secrets under the UCPA. In such circumstances, the licensor's trustee may prefer to continue performing the license agreement and receive the royalties or to sell the trade secrets to the licensee rather than terminating the license agreement and no longer receiving royalties from the licensee. Based on the foregoing, we consider that it is not necessary to afford additional protection to a trade secrets licensee in the event of the licensor's insolvency.

8. Data licenses

In Japan, a database may be protected under the Copyright Act if it meets the 'creativity' requirement, or as a trade secret or as 'protected data'[55] if it meets the requirements under the UCPA.

If a database is protected by copyright, a data license will qualify as a copyright license and, as noted above, the license will continue in the event of the licensor's insolvency. On the other hand, if a database is not protected by copyright, a data license will be a contractual right of the licensee to use the database and a contractual obligation of the licensor to make the database available to the licensee. Such a license is not granted by operation of an IP law or any other laws. Therefore, a licensee cannot assert a license in the event that a licensor becomes insolvent and the database is assigned to a third party by the licensor's trustee. As noted above, the situation is the same if the database is protected as a trade secret under the UCPA.

However, such a third party may not be able to prohibit the licensee from continuing to use the database as permitted under the licensing agreement because such use is unlikely to constitute infringement of any IP right or a violation of the UCPA.[56] Under Japanese law, an injunction can only be granted where a law specifically provides for a party's right to an injunction. Therefore, if a licensed database is not protected by copyright or as a trade secret, the database owner may only seek damages for a breach of contract or tort.

9. Concluding thought

While the Patent Act and the Copyright Act offer protection to a licensee where a licensor becomes insolvent, this is not necessarily the case for other types of IP. Such lack of consistency becomes particularly troublesome in the case of transactions and projects that involve multiple types of IP. Thus, we believe that it would be better if Japanese law would provide for a consistent approach across the various types of IP that become subject to licensing transactions. As we noted above, it would be of particular importance here to harmonize trademark law with the patent and copyright regime.

III. Continued effect of a license in the event of a licensor's insolvency

1. Automatic transfer of license agreement to a new IP owner

As discussed above, the Patent Act and Copyright Act both provide that a licensee may assert a license against a third party that subsequently acquires the licensed right without having to register the license. However, under the Trademark Act, a licensee can only assert a license against a third party that subsequently acquires the licensed trademark if the license is registered with the JPO. In any event, the law does not specify whether such a third party assumes all contractual obligations under a license agreement.

The Civil Code provides, as a general principle, that an agreement or any right or obligation thereunder will not be transferred to a third party in the absence of an agreement to the contrary, except where there is a general succession by operation of law (such as in the case of inheritance if a party is an individual, or merger if a party is a corporation).[57] If we apply this general principle, a

53 A patented invention is in the public domain and the licensee may access it without any disclosure by the licensor. In some cases, a patent license is accompanied by a licensor's obligation to provide technical information necessary to use the patented invention. However, such an obligation is contractual and is not an essential part of a patent license.

54 In many cases, a trade secrets license requires an upfront royalty payment before or in exchange for the disclosure of the trade secrets.

55 In 2018, the UCPA was amended to introduce the concept of 'protected data' to offer protection to certain data shared among a limited number of businesses which may not qualify as a 'trade secret'. Under art 2(1)(xi) to (xvi) UCPA, unauthorized acquisition, use or disclosure of 'protected data' may result in civil remedies such as injunctions and damages: Ministry of Economy, Trade and Industry, 'Outline of the 2018 revision of the Unfair Competition Prevention Act (limited provision data, technical restriction measures, etc)' (*Ministry of Economy, Trade and Industry*) <https://www.meti.go.jp/policy/economy/chizai/chiteki/H30nen_fukyohoshosai.pdf> accessed 31 January 2021.

56 Our discussion above in relation to a trade secret licensor's insolvency also applies to 'protected data' under art 2(1)(xiv) UCPA.

57 Minpō [Civil Code], Act No 89 of 27 April 1896 (Civil Code), art 539-2.

license agreement will not automatically transfer to a third party.[58]

On the other hand, if the rules relating to real estate lease agreements are applied to IP licenses,[59] the third party would assume all rights and obligations under the license agreement on acquisition of the licensed right.[60] Finally, some commentators try to find a middle ground by arguing that the third party will automatically assume the effect of certain provisions that are typical in a license agreement but not others.[61]

When the Patent Act was amended in 2011, the government decided not to include a detailed provision on this issue, and left it for the courts to decide on a case-by-case basis. The same happened when the Copyright Act was amended in 2020. Unfortunately, courts in Japan have not had an opportunity to provide any further guidance on this issue.

Therefore, for the time being, licensors and licensees will need to negotiate the terms of a licensing arrangement in relation to the subsequent acquisition of licensed IP.[62] If we apply the general principle under the Civil Code, the following position would be a reasonable starting position when negotiating an IP licensing arrangement:

- Exclusivity – a new IP owner does not assume the obligation and can grant licenses to other licensees;
- Licensee's right to grant sublicenses – a licensee is not authorized to grant new sublicenses, but a new IP owner will have to recognize any existing sublicensee's right to use the IP;
- Licensor's obligation for specific performance – a new IP owner does not assume the obligation.

2. Cross-license agreements and insolvency

The above discussion has focused on one-way licenses – i.e. agreements to license specific IP owned by a licensor to a licensee. However, we must also consider how insolvency can affect other types of IP licensing arrangements such as cross-license agreements and patent pool agreements.

Cross license agreements are particularly common in the IT industry, where multiple technological components subject to a multitude of patents are combined in one product.[63] The following example may be helpful for the purpose of discussion.

Company A and Company B execute a cross-license agreement which covers all of the IP of both companies – patents, copyright and trade secrets. If Company A became insolvent prior to the amendment of the Patent Act in 2011, a trustee administering the estate of Company A could have cancelled the entire license granted by Company A to Company B.[64] The trustee could also have argued that they were entitled to cancel the entire cross-license agreement, including the license granted by Company B to Company A, if the licenses granted under the agreement were inseparable. Following the amendment of the Patent Act and the Copyright Act discussed above, the risk of a trustee successfully cancelling such a cross-license agreement is certainly lower. A trustee can, however, still cancel a trade secret license and could argue that it can cancel the entire cross-license agreement if the trade secret license cannot be separated from the patent or the copyright license. That said, if the main purpose of the cross-license agreement is to ensure each party's freedom to operate rather than actually sharing technology with each other, we think it would be reasonable to conclude that the main focus of the agreement is to allow the use of the licensed patent rights. In this case, the trustee would not be able to cancel the cross-license agreement.

a) Cross license agreement for IP in various jurisdictions

In practice, many one-way licenses and cross-license agreements cover IP in multiple jurisdictions, including Japan. In some cases, it can be difficult to identify the primary IP from a geographical perspective – for example, when a cross license is granted worldwide.

Sometimes the laws of multiple jurisdictions are identified as governing the major IP. For example, a cross license could be granted primarily for Japan and South Korea where Company B already sells products, but also for other Asia Pacific countries where Company B may sell products in the future. It might not be possible to conclude whether the license can be asserted against a trustee in all jurisdictions. For example, while a patent license may be asserted without registration in Japan, this is not the case for patents registered in South Korea.[65] In cases such as these, we will often need to return to the issue of whether the cross-license agreement is separable or not.

Some commentators in Japan have argued that this issue should be decided based on the consideration

58 This view is supported by commentators who consider that the new patent owner should not be subject to the licensor's obligations unless the new patent owner has agreed to do so. See, for example, Emiko Maruyama, 'Tokkyoken no jyōto to raisensa- no keiyakujō no chii no iten' ['Assignment of a Patent and Transfer of Licensor's Position under a License Agreement'] (2017) 74 Law & Technology 43.

59 Civil Code, art 605-2.

60 This view is supported by commentators who consider that the licensor's obligations can be performed by anyone who owns the licensed IP, for example, the obligation not to use the intellectual property can be performed by anyone who owns the intellectual property. See, for example, Minoru Takeda, 'Tokkyo raisensu keiyaku to tōzentaikō' ['Patent License Agreement and Automatic Assignment Mechanism'] in Ryu Takabayashi and others (eds), *Gendai chitekizaisan-hō kōza 4 - Chitekizaisan hōgaku no rekishiteki chōkan* [*Modern Intellectual Property Law Lectures IV – Historical Overview of Intellectual Property Jurisprudence*] (Nippon Hyoron 2012) 46.

61 This view is supported by commentators who consider that some of the licensor's obligations can be performed by anyone who owns the licensed IP, while other obligations can be performed only by the original patent owner. Mio Ishii stated that while the obligation to pay royalties passes to the new patent owner, other obligations such as confidentiality, cross-licensing and not granting license to others, do not pass to the new patent owner. See Mio Ishii, 'Tokkyoken no tsujōjisshiken no tōzentaikōseido to raisensu keiyaku kankei no shōkei' ['The Automatic Assignment Mechanism of Ordinary Patent License and the Assignment of License Agreement'] (2012) 84(6) Horitsu Ronso 369-374.

62 In some transactions the licensee will acquire the IP from the trustee and become the new owner. In this case, the license agreement will cancel due to 'confusion of rights' (the licensor and the licensee are the same person) pursuant to Civil Code, art 179(2).

63 Miyoshi Hiratsuka, 'Sofutowea tokkyo ni yoru inobe-shon no sokushin oyobi sogai nitsuite no ichikōsatsu – tokuni raisensshi- hogo no kanten kara' ['A Study on the Promotion and Inhibition of Innovation by Software Patents – Especially from the Viewpoint of Licensee Protection'] (2008) 58 Intellectual Property Management 31.

64 This will not apply if Company B has registered its patent license with the JPO. In 2009, the law was amended to allow registration of non-exclusive patent licenses granted under cross-license agreements which do not specify each patent by registration number (so-called 'blanket cross license agreements'). However, the registration system was not used due to its procedural requirements and cost and so was abolished in 2011.

65 Matsuda (n 18) 180.

Table 2. Cross-license agreements and a party's insolvency

Scenario	Are the cross-license agreements inseparable?	Can Company B assert its license against Company A's trustee?	Can Company A's trustee cancel the entire cross license agreement?
Company A and Company B granted each other patent(s) for free.	Yes, because consideration is recognized.	Yes	No, because the license is inseparable
Either Company A or Company B has paid a royalty under the cross-license agreement.	Maybe yes, because it is likely to be recognized that there was consideration.	Yes	No, because the license is likely to be considered inseparable
Both Company A and Company B paid royalties under the cross-license agreement.	No. Could be considered a combination of two separate license agreements.	Yes	No, only the license granted by Company B to Company A and associated terms can be cancelled because of the separability.
	Yes, if it is recognized that there was consideration.	Yes	No, because the license is inseparable

Source: Prepared by authors

arrangement under the cross-license agreement.[66] Furthermore, where the cross-license agreement is considered inseparable and the licensor's trustee has the right to cancel the license, another issue is whether the licensor's trustee may cancel the remaining portion of the cross-license agreement – for example, the license granted by the licensee to the licensor.

There is no court decision or established opinion on these issues, and if the question arises in litigation it will need to be addressed by the competent courts based on the facts of each case. To better understand the relevant issues, we summarize the legal effects based on several hypothetical scenarios in table 2.

b) Patent pools

A patent pool is an agreement between two or more patent owners to license their patents to one another or to third parties. Typically, companies in a patent pool grant a license to a central entity, and then the central entity grants a sublicense to each company participating in the pool. According to Japanese law and as explained above, if one of the participating companies becomes insolvent, the other participating companies can assert their sublicense against the trustee of the insolvent company and against any third parties that acquire the licensed patents from the insolvent company. The trustee cannot cancel the license agreements, but nor will a new owner of the licensed patents automatically assume the obligations under the license agreements. This can lead to a deadlock, especially if patent pool members are unwilling to invite the new owner to the pool and to cross-license the IP with them.[67] To avoid such a situation, the trustee might be well-advised to attempt to find a new owner that is already a member of the patent pool.

3. Concluding Thought

In the event of the continuation of a license upon the licensor's insolvency, a number of grey areas remain under Japanese law. These include the exclusivity of the license, the nature of sublicensing rights, a licensor's obligations of specific performance, and whether or not obligations for cross licenses and designation for patent pools continue to remain in place. Despite these open issues, the novel protection of licensees in the event of a licensor's insolvency under the Copyright Act is a significant improvement of a licensee's position. We therefore believe that obtaining a license will be the most suitable option for many organizations intending to use Japanese IP rights, in particular in the context of the application of software.

IV. Joint ownership of IP in software development agreements

1. Background

The protection of software can involve copyright, patents and trade secrets. If a software developer makes its software available to multiple users, the software developer and each user would typically enter into a standard form license agreement provided by the software developer – for example, a 'click-on' or 'shrink-wrap' end user license agreement. In Japan, if a software developer (vendor) develops customized software for a specific customer (client), the vendor and the client would typically negotiate a software development agreement, which would provide whether the IP in the software will be assigned or licensed to the client, or jointly owned by the vendor and the client.

66 Nobuaki Kobayashi and others, 'Erupi-da Monogatari Daisankai: Erupi-da memori no chitekizaisan wo meguru shomondai' ['Elpida Story Part 3: Various Issues relating to Intellectual Property Rights in Elpida Memory'] (2014) New Business Law No 1023, 50.

67 This situation would usually not arise if the pooled patents cover standard-essential technology, as the other patentees would have to license such patents if they are subject to a fair, reasonable and non-discriminatory (FRAND) commitment.

Deliverables of a software development agreement usually include a program and/or source codes, which are protected as 'works of computer programming',[68] and related documents, which are protected as 'literary works'.[69] Copyright in such deliverables belong to the 'author' (vendor),[70] unless otherwise provided for in the software development agreement. 'Copyright' and 'ownership' of the deliverables are, of course, different legal concepts.[71] If the ownership of the works of computer programming belongs to the client under the software development agreement, the client is permitted under the Copyright Act to reproduce and adapt the computer program works to the extent necessary for its own execution of the computer program.[72] That being said, if a client wishes to allow its customers or other third parties to execute the computer program or incorporate the computer program into their own product for selling it to their customers, it would be necessary for the client to acquire the copyright[73] or seek a license to the copyright from the vendor under the software development agreement.[74] Where there is joint development by the vendor and the client, it is possible for the vendor and the client to own the copyright as joint authors.[75]

Patentable inventions may also be created in the course of the software development. The right to apply for a patent belongs to the 'inventor' (vendor) unless otherwise provided in the software development agreement.[76] Where there is a joint development by the vendor and the client, it is possible for the vendor and the client to own the right to apply for a patent as joint inventors.

In most cases, the vendor will probably insist on sole ownership of the copyright (and any patents), and will only be prepared to grant a license to the client. Conversely, the client may also demand ownership of copyright (and any patents), and may ultimately agree to jointly own the copyright (and any patents) in order to reach a compromise. Before the Patent Act and the Copyright Act were amended to offer protection to licensees in the event of a licensor's insolvency, a client had good reason to be concerned that a license would be insufficient to protect its interests, and would have had a strong preference for joint ownership with the vendor. Another option would be for the software development agreement to provide that the licensed IP automatically transfers from the vendor to the client in case of the vendor's insolvency. However, there is a considerable risk that such a provision would be unenforceable against the vendor's trustee in insolvency proceedings,[77] and so a client may still prefer joint ownership to a license.

However, there are also certain risks in jointly owning the IP (more specifically, patents and copyright) in software. As we discuss in Part IV.2 below, if a vendor becomes subject to bankruptcy proceedings, a client cannot exclude the risk of the vendor's trustee selling the vendor's joint ownership interest to a third party. As we discuss in Parts IV.3 and IV.4, a client may request a division of the joint ownership, but the process is complex. Further, as we discuss in Part IV.5, joint ownership in IP may be unpredictable compared to a non-exclusive

68 Copyright Act, art 10(1)(ix).

69 Copyright Act, art 10(1)(i).

70 In principle, a copyrighted work is created by one or more individuals and such individual(s) are the 'author' of the work. If an employee creates a copyrighted work (except for a work of computer programming) in the course of performing their duties on the initiative of an employer, and the employer publishes the work under its own name, the employer would be the 'author' of the work, unless otherwise provided in a contract, employment rules or the like at the time of creation: Copyright Act, art 15(1). Further, if an employee creates a work of computer programming in the course of performing their duties, the employer would be the 'author' of the work, unless otherwise provided in a contract, employment rules or the like at the time of creation: Copyright Act, art 15(2). There is no publishing requirement for a work of computer programming. This is the so-called 'work-for-hire' rule. Vendors need to make sure they can rely on this rule and own the relevant copyright when they decide to assign the copyright to the client or to jointly own the copyright with the client.

71 If the vendor only delivers the program and not the source code to the client, it would be difficult for the client to adapt or update the software on its own, even if the client has acquired the copyright or is granted a copyright license to do so from the vendor. Therefore, it is important for the client to require the vendor to deliver the source code to the client, or to have an escrow arrangement in place so that the client can request disclosure of the source code when necessary. In Japan, the Software Information Center (SOFTIC) provides software escrow services. To use the service, parties must submit a copy of a software development agreement that clearly sets out when SOFTIC may deliver the source code to a client – for example, on the vendor's bankruptcy, the vendor's failure to provide maintenance services for a certain period of time (due to force majeure or otherwise), closure of the vendor's business or office.

72 Copyright Act, art 47-3(1) and art 47-6(1).

73 When drafting a copyright assignment provision, the client should ensure that (i) the rights under arts 27 and 28 of the Copyright Act (that is, adaptation rights) are expressly assigned; and (ii) the vendor agrees not to assert its moral rights under the Copyright Act against the client or its customers. Under the Copyright Act, the rights under arts 27 and 28 shall be presumed to be reserved to the assignor unless they are specifically referred to in the assignment agreement. Such presumption can be reversed by sufficient evidence (Chitekizaisan Kōtō Saibansho [Intellectual Property High Court], 31 August 2006, Hei 17 (Ne) 10070) but it is important for the client to address this issue in the software development agreement. Furthermore, under art 59 of the Copyright Act, moral rights are personal to the author and cannot be assigned to third parties, so it is important for the client to address this issue in the software development agreement. Finally, depending on the power balance between the parties, a client could be considered to be abusing its superior bargaining position against the vendor by requiring the vendor to assign all copyright without sufficient consideration. This would raise antitrust issues and need to be addressed when structuring the fee arrangement and drafting the software development agreement.

74 Motohiro Takahashi, 'Benda- kigyo kara shimesareta sofutowea kaihatsu itaku keiyaku' ['Software Development Consignment Contract as proposed by Vendor Companies'] 2014(12) Business Law Journal 42.

75 Shuntaro Fujii and Wataru Shimizu, 'Sofutowea kaihatsuitaku-keiyaku ni tsuite shitaukehō to no kankei wo chu-shin ni' ['Software Development Consignment Contracts – Relationship with the Subcontract Act'] (2020) 18 (208) Chizai Purizumu 135.

76 In principle, if a patentable invention is invented by one or more individuals, such individual(s) would be the 'inventor(s)' of the invention. If an employee invents a patentable invention within the scope of the employer's business ('Employee Invention'), the employer has the right to apply for a patent for the Employee Invention, if provided in a contract, employment rules or the like in advance: Patent Act, art 35(3). If the employer has provided in a contract, employment rules or the like the right to apply for a patent for an Employee Invention, the employee is entitled to a 'reasonable benefit': Patent Act, art 35(4). The 'reasonable benefit' in a contract, employment rules or the like must not be unreasonable based on: the consultation between the employer and employees on how to establish standards for calculating the 'reasonable benefit', disclosure of such standards, opinions of the employee when the 'reasonable benefit' is decided, and other circumstances: Patent Act, art 35(5). The vendor needs to make sure it may rely on this rule and owns the relevant patent when it decides to assign the patent to the client or to jointly own the patent with the client.

77 A trustee has a 'right of avoidance' in insolvency proceedings. Even if the license agreement provides that the vendor shall assign the licensed IP to the client on the vendor's insolvency, the vendor's trustee may avoid (that is, cancel) such assignment in the interest of the bankruptcy estate after the commencement of the insolvency proceedings: Bankruptcy Act, art 160; Civil Rehabilitation Act, art 127; Corporate Reorganization Act, art 86. See Makoto Hattori and Eiji Katayama, 'Kyōyutokkyo to tōsan – kyōyutokkyokensha ni yoru hokano kyōyu-sha oyobi raisenshi- he no eikyou to sono taisaku' ['Joint Patents and Bankruptcy – Impact of Bankruptcy on other Joint Patent Owners and Licensees and Countermeasures'] (2004) 54 Intellectual Property Management 35.

license, especially when the IP covers multiple jurisdictions. Now that the Copyright Act has been amended to offer protection to licensees in the event of a licensor's insolvency, a client should reconsider whether to rely on joint ownership in the software development agreement or to opt for a non-exclusive license.

2. Insolvency of one of the joint owners

If a vendor becomes subject to bankruptcy proceedings, the vendor's joint ownership interest will belong to the bankruptcy estate and will be subject to the trustee's administration and disposal.[78] The trustee must 'monetize' the vendor's joint ownership interest by either selling the joint ownership interest or by requesting a division of the joint ownership.[79] In bankruptcy proceedings, a trustee usually prefers to dispose of a vendor's property as soon as possible. As discussed below, the division of joint ownership is complex, and so trustees usually prefer to sell the joint ownership interest to other joint owners or third parties. If the trustee decides to sell the vendor's joint ownership interest to a client, there should be little legal risk for the client.[80]

On the other hand, a trustee may be able to generate a higher sales price if they sell the vendor's joint ownership interest to a third party. If the sale is completed by transferring the vendor's business wholly or partly by merger (general succession by operation of law), the trustee does not need to obtain the client's consent to sell the vendor's joint ownership interest, and the client would have no basis for objecting to such a sale. To address any risk to a client, the software development agreement could provide that the vendor may not assign the joint ownership interest through merger, though such a provision might not be enforceable against the trustee.[81]

Another option would be for the software development agreement to provide that the vendor's joint ownership interest automatically transfers from the vendor to the client upon the vendor's insolvency. A client may use this provision as leverage when negotiating with a trustee. However, the provision might not be legally enforceable against the trustee if the trustee decides to sell the vendor's joint ownership interest to a third party.[82]

3. Division of jointly-owned IP in the event of the vendor's insolvency

If a client is unsuccessful in purchasing the vendor's joint ownership interest from a trustee, the next option would be to cancel the joint ownership by requesting division of the jointly-owned IP.

Under Japanese law, jointly-owned property can be divided through an agreement of all joint owners, or by filing a petition for division with a court having jurisdiction over the location of the joint property.[83] Although the joint owners may have agreed not to divide the jointly-owned property,[84] a trustee may request a division if one of the joint owners becomes subject to bankruptcy proceedings.[85] If the trustee makes such a request, the other joint owners may acquire the bankrupt company's joint ownership interest by paying reasonable compensation.[86]

Although the division of IP, as opposed to real property, does not involve a physical apportionment of the property, a client is still entitled to compensation – that is, following the valuation of the IP, a client may require the vendor to pay an amount corresponding to its share of the joint ownership.[87]

4. Division of jointly-owned IP if the vendor assigns its interest outside insolvency proceedings

Even if the vendor is not subject to insolvency proceedings, the client may file a request for division with a court governing the location of the joint property, unless the client and the vendor have agreed in the software development agreement not to divide the jointly-owned property. However, such an agreement is only enforceable for five years from the effective date of the software development agreement. Therefore, if the five-year statutory period has lapsed, the client may file a request for division and, following the valuation of the IP, require the vendor to pay compensation for the client's share of the joint ownership.

5. Non-exclusive license versus joint ownership of IP

Even if the vendor is not subject to insolvency proceedings, jointly-owned IP may be unpredictable compared to a non-exclusive license. The following table 3 provides a comparison of the actions a client can take without the vendor's consent under Japanese law in the event of the client being either a non-exclusive licensee or a joint owner of the IP under both copyright and patent law.

Under Japanese law, the major difference between a non-exclusive license and joint ownership is whether the

78 Bankruptcy Act, art 34(1). Any and all property held by the bankrupt at the time of the commencement of bankruptcy proceedings shall constitute the bankruptcy estate, regardless of whether the property is located in Japan. This means that jointly-owned IP would be subject to Japanese bankruptcy law if the vendor is a Japanese company, regardless of whether the jointly-owned IP is governed by Japanese law.

79 Division of jointly-owned IP is further discussed below. In restructuring proceedings, there is an option to not realize the vendor's joint ownership interest and to continue the vendor's business by utilizing the joint ownership interest. See n 35.

80 However, the client will be required to pay the purchase price, which would not be required if the client was relying on a license rather than joint ownership.

81 See n 77.

82 ibid.

83 Another issue arises where the jointly-owned IP is not governed by Japanese law. Whether division of jointly-owned IP is possible would depend on the foreign law governing the jointly-owned IP. Even if division of jointly-owned IP is possible under the foreign law, Japanese courts might not have jurisdiction over such a matter, and the trustee or the client might need to seek redress in a foreign court.

84 Civil Code, art 256(1) (proviso). An agreement not to divide the jointly-owned property is valid for no more than five years, and the joint owners may renew such an agreement for a period not exceeding five years from the time of the renewal: Civil Code, art 256(2).

85 Bankruptcy Act, art 52(1); Civil Rehabilitation Act, art 48(1); Corporate Reorganization Act, art 60(1).

86 Bankruptcy Act, art 52(2); Civil Rehabilitation Act, art 48(2); Corporate Reorganization Act, art 60(2).

87 Previously, art 54 of the Bankruptcy Act provided joint owners a 'right of separate satisfaction' for any claims arising from the joint ownership against the bankrupt. For example, other joint owners could collect costs for maintaining the patent or costs related to litigation with respect to the patent from the bankrupt's joint-ownership interest, without going through bankruptcy proceedings. However, this provision was repealed.

Table 3. Actions a client can take without the vendor's consent in Japan

	Non-exclusive license		Joint ownership	
Can the client use the IP without the vendor's consent?	Patent Copyright	Yes, to the extent permitted under the license agreement.[88]	Patent Copyright	Yes[89] No, in the absence of an agreement to the contrary.
Can the vendor assign the IP without the client's consent?	Patent Copyright	Yes	Patent Copyright	No Uncertain[90]
Can the client continue using the IP if the vendor assigns the IP to a third party?	Patent Copyright	Yes	Patent Copyright	Yes No, in the absence of an agreement to the contrary.
Can the client assign its rights to a third party without the vendor's consent?	Patent Copyright	No, unless permitted under the license agreement.	Patent Copyright	No, in the absence of an agreement to the contrary. Uncertain[91]
Can the client grant a (non-exclusive) sublicense without the vendor's consent?	Patent Copyright	No, unless permitted under the license agreement.	Patent Copyright	No, unless agreed by all joint owners.[92]
Can the client autonomously seek injunctive relief against a third-party infringer?	Patent Copyright	No	Patent Copyright	Yes. Each joint owner may seek injunctive relief to protect its rights.
Can the client autonomously seek damages against a third-party infringer?	Patent Copyright	No Yes, if client is granted an exclusive status.	Patent Copyright	Yes. There is a debate as to whether one of the joint owners may seek damages based on the ownership ratio or based on the exploitation ratio.[93]

Source: Prepared by authors

client may seek injunctive relief and damages against a third-party infringer without the vendor's support and consent.

However, this is not always true in other jurisdictions: while most countries allow a joint owner of a patent to seek injunctive relief without involving other joint owners, this is not possible in the US and Indonesia.[94] In these jurisdictions, a client cannot seek injunctive relief or damages against a third-party infringer if the vendor does not cooperate with the client. In practice, a vendor might have a corporate or contractual relationship with the infringer and so might not be able to cooperate with a client even if they are willing to do so.

Further, in some jurisdictions, the default rule is that a joint owner can freely assign its joint ownership or grant a sublicense without consent from the other joint owners. For example, a joint owner of a patent can freely assign its joint ownership without consent from the other joint owners in the US, Germany, Malaysia and Israel, and a joint owner of a patent can freely grant a sublicense without consent from the other joint owners in the US and China.[95] This creates uncertainty when a software development agreement only provides for joint ownership of the IP by a vendor and a client, without addressing sublicensing and assignment. For example, in Japan a client might assume that a vendor would not be able to assign its joint ownership or grant a sublicense without its consent, but a vendor in the US might

88 Patent Act, art 78(2).

89 Patent Act, art 73(2). In some jurisdictions, a joint owner who uses IP is required to compensate the other joint owners who do not use the IP. This is not a requirement under Japanese law.

90 Copyright Act, art. 65(3). Although the client cannot assign the joint ownership interest in copyright to a third party without the vendor's consent, such consent cannot be unjustifiably withheld; otherwise the client can bring a legal action against the vendor to obtain a 'quasi consent' by order of a court. In the event of a vendor's insolvency, it is likely that trustees would ask the other joint owner(s) (that is, the client) to purchase the copyright interest, but this is not always the case.

91 ibid.

92 Generally speaking, if the client wishes to involve a third party in exploiting the IP without involving the vendor, one option would be to retain such third party as a 'subcontractor' rather than a 'sublicensee'. For example, if the third party manufactures products using the IP for the client, Japanese courts would consider such third party's use of IP as part of the client's use (ie, it does not constitute 'sublicensing') if the third party is subject to the client's instructions, delivers all of the products to the client, and the products bear the client's trademark or the like: Nakayama (n 16) 331. Some authors argue that the distinction between 'subcontracting' and 'sublicensing' is not clear and propose that a joint owner should not be required to obtain the other joint owners' consent for sublicensing the IP: Ichiro Nakayama, 'Hatsumei no jisshi wo meguru kyōyu-tokkyokensha kan no kiritsu no arikata' ['The Desired Model Among Joint Patent Holders Regarding the Implementation of Inventions'] (2012) 9(2) Journal of the Japan Intellectual Property Association 4-15.

93 It would be reasonable to grant damages proportionate to the individual share of joint ownership if damages are granted based on a reasonable royalty (Patent Act, art 102(3), Copyright Act, art 114(3)). However, this may not be the case if damages are granted based on the patent holder's profit rate and the quantity sold by the infringer (Patent Act, art 102(1), Copyright Act, art 114(1)) or based on the profit received by the infringer (Patent Act, art 102(2), Copyright Act, art 114(2)). For example, if a joint owner markets the product on a large scale while the other joint owner markets the product on a limited basis (or does not market the product at all), damages should be proportionate to the amount and substantiality of the portion being exploited. See Nakayama (n 16) 333.

94 Hiroshi Hasegawa and Toshio Miyake, 'Tokkyoken no kyōyu ni taisuru kokunaigai no hōtekiseiyaku ni tsuite' ['Legal Restrictions on Joint Patent Rights in Japan and Overseas'] (2020) 70(7) Intellectual Property Management 1027; for US, see also Table 4.

95 See also Table 4.

assume that it is free to assign its joint ownership or grant a sublicense without the client's consent. Theoretically, the Japanese IP would be subject to the Japanese rule, and the US IP would be subject to the US rule. However, how this would work in practice is difficult to determine in a global software market.[96]

Most importantly, in some jurisdictions, a jointly-owned copyright does not necessarily allow a client to use the IP without the vendor's consent. In Japan, the default rule is that a joint owner may not use the copyright without consent from the other joint owners, so the client may use the copyright only to the extent expressly permitted under the software development agreement. In Germany, a client cannot be a joint owner of the copyright unless the client is a co-author of the work. This means that the client may end up having no joint ownership or express license to the copyright if the software development agreement ignores the specifics of German copyright law.

Table 4 of this article provides a comparison of the actions a client can take without the vendor's consent in Japan, the US and Germany, again comparing clients who are either a joint owner of the IP or a non-exclusive licensee under both copyright and patent law. As we proposed above, the ramifications of joint ownership in IP may be more difficult to predict than those of a non-exclusive license, especially when the IP covers multiple jurisdictions. Now that the Copyright Act has been amended to offer protection to licensees in the event of a licensor's insolvency, a client should reconsider whether to rely on joint ownership in the software development agreement or to opt for a non-exclusive license.

V. Licensor's position in the event of licensee's insolvency

Legislative debate in Japan in the last few decades has tended to focus on protecting licensees. However, we think that it is also worth considering how a licensor may be affected by a licensee's insolvency or force majeure events interrupting the licensee's business. Especially in the context of exclusive license agreements, a licensor could also bear a certain degree of risk if a licensee becomes insolvent. In such a circumstance, the licensor might not only be unable to collect royalty payments from the licensee, but also be precluded from granting a license to a new licensee due to the exclusivity granted under the license agreement.

1. Cancellation of the exclusive license agreement

If a licensee becomes insolvent and has ongoing royalty payment obligations, the exclusive license agreement will be considered to be an executory bilateral contract, and the licensee's trustee may cancel the exclusive license agreement to release the insolvent licensee from any ongoing royalty payments. If a licensee has already paid the royalties before becoming insolvent, any attempt by the licensee's trustee's to cancel the exclusive license agreement and to recover the paid royalties from the licensor would fail because the exclusive license agreement would not be considered an executory bilateral contract.

On the other hand, a licensor will not be able to cancel an exclusive license agreement if a licensee becomes insolvent unless the agreement provides for such a right. A licensor can require the licensee's trustee to provide a 'definite answer' within a 'reasonable period' designated by the licensor on whether the trustee will cancel or perform the exclusive license agreement.[97] In bankruptcy proceedings, if the licensee's trustee does not provide a definite answer within a reasonable period, the trustee would be deemed to have cancelled the exclusive license agreement and the licensor can grant a license to a new licensee. In civil rehabilitation proceedings, if the licensee's trustee does not provide a definite answer within a reasonable period, the trustee would be deemed to have waived its rights to cancel the exclusive license agreement, and the licensor would not be able to grant a license to a new licensee due to the exclusivity granted by the license. To avoid such a risk, a licensor needs to ensure that the exclusive license agreement provides for the licensor's right to cancel the agreement in the event of the licensee's insolvency, even though there is a risk that such provision would not be enforceable against the licensee's trustee in the insolvency proceedings.[98] It is also important to provide in the license agreement that the licensor has no obligation to return any royalty paid by the licensee prior to cancellation.

2. Revoking the exclusivity of the license agreement

Under exclusive license agreements, a licensee is often required to pay a minimum royalty to maintain its exclusivity. If a licensee becomes insolvent and fails to pay the minimum royalty, such failure may revoke the exclusivity, and the licensor would be able to grant a license to a new licensee. In practice, minimum royalties are generally calculated on a quarterly or annual basis, which means that the licensor may not be able to revoke the exclusivity immediately after the licensee becomes insolvent. To avoid such a risk, a licensor needs to ensure that the exclusive license agreement provides for the licensor's right to revoke the exclusivity in the event of the licensee's insolvency.

VI. How the licensee and licensor are protected in the event of a force majeure event

1. Force majeure and relevant articles in the Civil Code

'Force majeure' generally refers to an event or effect that can be neither anticipated nor controlled, in particular, an unexpected event that prevents someone from doing or completing something that he or she had previously agreed or planned to do. The term includes both acts of nature, such as floods and hurricanes, and acts of people, such as riots, strikes, and wars.[99] In many cases, IP license

96 For example, if the vendor in the US assigns its joint ownership or grants a sublicense to a third party and such third party sells the software to its customer in the US, and then such software is sold to the client's competitor in Japan, the client in Japan may wish to prohibit the competitor from using the software based on the client's joint ownership in the IP. However, the competitor may argue that the Japanese IP has been exhausted by the authorized sale in the US (under the so-called 'international exhaustion doctrine').

97 See discussion above in relation to an insolvent licensor.

98 See n 77. The licensee's trustee may exercise its 'right of avoidance' and cancel the termination by the licensor.

99 Bryan A Garner (ed), *Black's Law Dictionary* (10th edn, Thomson West 2014).

agreements include a 'force majeure clause' which addresses the risk of loss if performance becomes impossible or impracticable in the case of a force majeure event.

Article 415 of the Civil Code addresses a breach of contract and refers to cases where the failure of performance is due to events that are not attributable to an obligor. The English translation of Art. 415(1) Civil Code states:

> 'If an obligor fails to perform in a way consistent with the purpose of the obligation or the performance of an obligation is impossible, the obligee may claim compensation for loss or damage arising from the failure; *provided, however, that this does not apply if the failure to perform the obligation is due to grounds not attributable to the obligor in light of the contract or other sources of obligation and the common sense in the transaction.*'[100]

Therefore, a party will not be liable to pay compensation for loss or damage if a failure to perform an obligation is due to grounds that are 'not attributable to the obligor in light of the contract, or other sources of obligation and the common sense in the transaction'.

However, Art. 419 of the Civil Code – which provides special rules for monetary debt – excludes force majeure as a defense. Article 419(3) provides:

> 'The obligor may not raise the defense of force majeure with respect to the compensation for loss or damage referred to in paragraph (1)'.

In other words, an obligor of monetary debt will still be obliged to pay money owed under the relevant contract.

However, these rules are not mandatory, and in many cases a tailor-made force majeure clause is included in a license agreement based on the contents of the agreement (in particular, the obligations under the agreement) and any negotiation.

The coronavirus disease (COVID-19) has resulted in a lot of cases where the interpretation and application of force majeure clauses are at issue. In the following section, we discuss how a force majeure clause affects the licensor or licensee's obligation in a license agreement.

2. Force majeure affecting the licensor's obligation

Generally speaking, whether or not performance becomes impossible or impracticable will be determined by considering the relevant party's circumstances as a result of the force majeure event, the nature of the obligation and any other relevant factors affecting the performance.

The core of a licensor's obligation – not to assert the licensed patent or other rights against a licensee – will not be affected by a force majeure event in most cases.

On the other hand, many license agreements provide for licensor's obligations such as technical assistance. In such cases, in order to evaluate whether or not performance becomes impossible or impracticable, we need to consider the nature of the obligation and any other relevant factors affecting the performance.

3. Force majeure affecting the licensee's obligation

As described above, whether or not performance becomes impossible or impracticable will be determined by considering the relevant party's circumstances as a result of the force majeure event, the nature of the obligation and any other relevant factors affecting the performance.

There are, of course, a variety of license agreements, some of which are complex (for example, franchise agreements) or that combine licensing and other types of agreements. Starting with a simple license agreement, the most significant obligation imposed on the licensee is the payment of royalties. There are various contract clauses that address royalties, but they generally address:

- initial royalty;
- ongoing royalties based on revenue or profit; and/or
- minimum royalties.

An initial royalty will usually be paid on or soon after the execution of the license agreement. Therefore, it is less likely that it will be affected by a force majeure event. However, as outlined above, if it is a monetary debt the obligor cannot raise the defense of force majeure, unless it is otherwise addressed in a license agreement. Therefore, an obligor may also have to pay interest in the case of late payment, even if a force majeure event has occurred.

In terms of ongoing royalties, let us assume that a licensee's business is affected by a force majeure event and its revenue/profit drops, but the licensed technology still generates some level of revenue or profit. In this case, the licensee still needs to pay the ongoing royalty. On the other hand, if a licensee's business – which completely relies on a licensed technology – is interrupted and no revenue or profit is generated, the licensee will not be obliged to pay the ongoing royalty.

Minimum royalties are probably the most controversial type of royalty. Not every license agreement will include a minimum royalty clause. However, if an agreement does include such a clause, it will often have little effect on the amount to be paid under the license. Furthermore, in most cases a licensee will have to pay the minimum royalty regardless of a force majeure event (due to the operation of Art. 419(3) of the Civil Code). This can sometimes be very onerous for a licensee. Of course, parties are free to negotiate and agree detailed rules about minimum royalties, which can also address the allocation of risk in the case of force majeure events.

4. Drafting an effective force majeure clause

In many cases a force majeure clause can be tailor-made for a particular license agreement. Here, we set out how to draft an effective force majeure clause.

First, it is helpful for both parties to set out the force majeure events as clearly and specifically as possible so that the clause provides clear and reliable criteria. It is also useful to include a clause that provides for renegotiation or a good-faith discussion to address how issues that arise as a result of a force majeure event may be resolved. It is also worth considering a clause that allows for the termination of a license agreement in the event that agreement cannot be reached as a result of renegotiation after a certain period of time has passed.

From the licensor's perspective, the grant of the license itself will generally not be affected by a force majeure event. However, other obligations such as technical

100 Emphasis added.

Table 4. Comparison – Joint ownership of IP versus a non-exclusive license in Japan, the US and Germany

1. Use by client. Question: can a client use the IP without the vendor's consent?

		The client is a joint owner	The client is a licensee
Japan	Patent	Yes, absent an agreement to the contrary. If there is no agreement between the parties, the client may use the IP without the vendor's consent.	Yes, to the extent permitted under the agreement.
	Copyright	No, absent an agreement to the contrary.[101] If there is no agreement between the parties, the client may not use the IP without the vendor's consent.	
US	Patent	Yes, absent an agreement to the contrary. If there is no agreement between the parties, the client may use the IP without any accounting of revenue to the vendor.	
	Copyright	Yes. The client may freely use the work without the knowledge or consent of the vendor.[102] However, the client must in principle account to the vendor for the profits derived from such use.[103]	
Germany	Patent	Yes, absent an agreement to the contrary. If there is no agreement between the parties, the client may use the IP to the extent that the vendor's right of use is not impaired.	
	Copyright	N/A[104]	

2. Assignment by the vendor (in the event of the vendor's insolvency): If the vendor becomes insolvent, can the vendor's trustee assign the IP to a third party without the client's consent?

		The client is a joint owner	The client is a licensee
Japan	Patent	No.	Yes, but the client may assert its license against the third party.
	Copyright	Unclear. Although the client may not assign the joint ownership interest of copyright to a third party without the vendor's consent, such consent cannot be unjustifiably withheld; otherwise the client may bring legal action against the vendor to obtain 'quasi consent' by order of a court, under which the vendor would be deemed to have consented to the assignment.[105] In most cases trustees ask other joint owner(s) (that is, the client) to purchase the copyright interest but this is not always the case.	

(*Continued*)

101 Copyright Act, art 65(2).
102 *Oddo v Ries* 743 F.2d 630 (9th Cir. 1984); *Weinstein v University of Ill.* 811 F.2d 1091, 1095 (7th Cir. 1987).
103 *Carter v Bailey* 64 Me. 458, 1874 WL 3843 (1874); *Maurel v Smith* 271 F. 211, 216 (2d Cir. 1921); *Shapiro, Bernstein & Co. v Jerry Vogel Music Co.* 73 F. Supp. 165, 168 (S.D.N.Y. 1947); *Greene v Ablon* 794 F.3d 133, 155 (1st Cir. 2015).
104 German copyright law does not allow transfer of the copyright to a new owner or co-owner. See s 29 German Copyright Act. The client would need to actively participate in the development of the software to gain co-authorship status which would enable co-ownership in the copyright. Commissioning the development of customized software does not satisfy the requirement for co-authorship.
105 Copyright Act, art 65(3); Nobuhiro Nakayama, *Chosakukenhō* [*Copyright Law*] (3th edn, Yuhikaku 2020) 277.

US	Patent Copyright	Yes. A joint owner may assign its interest in the work so that the assignee and the client become joint owners.	Yes, unless all 'essential rights' (the right of exclusivity in the IP, the right to transfer, and the right to sue infringers) have been transferred under the license agreement.[106] In such a case, the licensee is imputed to have 'title' to the IP.
Germany	Patent	Yes, absent a valid agreement to the contrary.	Yes, but client may assert its license against the third party.
	Copyright		Copyright cannot be assigned. The trustee can assign only rights of use of the copyright. Such transfer requires consent by the author, unless the transfer occurs in the context of the sale of an enterprise or of parts of an enterprise.
3. Use by the client (in the event of the vendor's insolvency): Can the client continue using the IP after the vendor becomes insolvent and the IP is assigned to a third party?			
		The client is a joint owner	The client is a licensee
Japan	Patent	Yes	Yes. The client may assert its license against a third party. That being said, it is unclear whether obligations under the license agreement will automatically transfer to the third party. For example, even if the license was exclusive, client may not continue to exclusively use the IP.
	Copyright	Unclear. If the vendor obtains 'quasi consent' through a court judgment, it is unclear whether the third party would be bound by the agreement between the vendor and the client, and the client may no longer be able to use the IP without the third party's consent.	
US	Patent	Yes. The basic rule applies in the context of bankruptcy (that is, a joint owner may use the patent without the consent of, and without accounting to, the other owners).[107]	Yes[108]
	Copyright	Yes	
Germany	Patent	Yes	Unclear. German insolvency law gives the trustee the right to terminate non-exclusive license agreements after commencement of insolvency proceedings.[109]
	Copyright	N/A	

(*Continued*)

106 11 U.S.C. § 365. see eg Peter S Menell, 'Bankruptcy Treatment of Intellectual Property Assets: An Economic Analysis' (2007) 22 Berkeley Tech LJ 733, at 758-766.
107 *In re Diomed Inc.*394 B.R. 260, 267 (Bankr. D. Ma. 2008); *In re HDD Rotary Sales LLC* 2013 WL 443968 (Bankr. S.D. Tex. 2013).
108 ibid.
109 That said, more recent case law restricted the trustee's right to terminate patent license agreements if the license was either fully paid-up, see Federal Supreme Court (Bundesgerichtshof, BGH), 21 October 2015, [2016] GRUR 173 – *Ecosoil*, or if the underlying license was a cross-license, see Higher Regional Court of Munich, 25 July 2013, [2013] GRUR-Prax 408 *Qimonda/Infineon*.

4. Assignment by the client: Question: Can the client assign its joint ownership interest/license to a third party without the vendor's consent?

		The client is a joint owner	The client is a licensee
Japan	Patent	No, absent an agreement to the contrary. The client may not assign its joint ownership interest without the vendor's consent.[110]	No, unless client is also transferring its business using the patented invention.[111] If the client wishes to assign its license but not its business using the patented invention, the client must obtain the vendor's consent.
	Copyright	Unclear. Although the client may not assign the joint ownership interest of copyright to a third party without the vendor's consent, such consent cannot be justifiably withheld; otherwise the client may obtain a 'quasi consent' through a court judgment, under which the vendor would be deemed to have consented to the assignment.	No[112]
US	Patent	Yes, absent an agreement to the contrary. A joint owner of a patent is a joint owner of the whole patent (as opposed to being a joint owner of only some claims or portions of the patent). As such, a joint owner may assign its undivided joint ownership right in the patent as a whole.	No, unless the client is an exclusive licensee and absent an anti-assignment clause in the licensing agreement.[113]
	Copyright	Yes. The assignee and vendor can become joint owners.	
Germany	Patent	Yes, absent an agreement to the contrary. Each joint owner can assign its joint ownership share.	No. An assignment of the non-exclusive license requires consent of the licensor.[114]
	Copyright	N/A	

5. Setting a security interest by the client: Can the client set a security interest on its joint ownership interest/license without the vendor's consent?

		The client is a joint owner	The client is a licensee
Japan	Patent Copyright	No, absent an agreement to the contrary. The client may not set a security interest on its joint ownership interest without the vendor's consent.[115]	No, absent an agreement to the contrary. The client may set a security interest on its license with the vendor's consent.[116]
US	Patent	Yes, absent an agreement to the contrary. A joint owner may grant a security interest in its undivided joint ownership right in the patent.	No. A non-exclusive licensee has no right to assign or transfer all or a portion of its interest.[117]

(*Continued*)

110 Patent Act, art 73(1).
111 Patent Act, art 94(1).
112 Copyright Act, art 63(3).
113 In the state of New York, the anti-assignment clause of the licensing agreement must expressly reference the patent, otherwise, it will be rendered unenforceable. See *New Haven, LLC v YKK Corp*. 210 F. Supp. 3d 549 (S.D.N.Y. 2016).
114 Federal Supreme Court, 15 May 1990, [1990] NJW-RR 1251, 1253 – *Kabelaufroller*; for a discussion under German law see Louis Pahlow, Lizenzen als handelbare Güter? – Nutzungsrecht und Nutzungsgegenstand im Softwareverkehr [Licenses as tradeable goods? – Rights and Objects of Use in Software Transactions] [2016/8] ZGE / IPJ 218-238.
115 Patent Act, art 73(1), Copyright Act, art 65(1).
116 Patent Act, art. 94(2). Copyright Act is silent on whether a licensee may set a security interest on its license without a licensor's consent. Theoretically, a copyright license is a contractual right and may be subject to a pledge, which can be asserted against the obligor and third parties if the obligor is notified or provides consent: Civil Code, art 364. For completeness, a security interest on a copyright itself can be asserted against third parties only if it is registered: Copyright Act, art 77(ii).
117 In 37 CFR 3.1, assignment of patent rights is defined as 'a transfer by a party of all or part of its right, title and interest in a patent [or] patent application. . ..'.

	Copyright	Yes. A joint owner has the right to transfer its share of ownership in the property. Such a transfer involves a security interest, such as a mortgage.[118] However, if the security interest will affect the entire property, all joint owners must agree to the transfer.	No, absent an agreement to the contrary; because under the Copyright Act, licensees are not granted the right to freely transfer the license.[119]
Germany	Patent	Yes, if it is only to the client's joint ownership interest of the patent. If it is to the entire patent, the vendor's consent is required.	No.
	Copyright	N/A	
6. Sublicensing by the client: Can the client grant a non-exclusive license to a third party without the vendor's consent?			
		The client is a joint owner	The client is a licensee
Japan	Patent Copyright	No, absent an agreement to the contrary. If there is no agreement between the parties, the client may not grant a non-exclusive license to a third party without the vendor's consent.[120]	No, absent an agreement to the contrary. If there is no agreement between the parties, the client may not grant a license to a third party without the vendor's consent.[121]
US	Patent	Yes, absent an agreement to the contrary. If there is no agreement, the parties may grant a non-exclusive license to a third party without the vendor's consent.[122]	No, unless permitted under the license agreement. As a general matter, a non-exclusive licensee does not have an implied sublicensing right.
	Copyright	Yes, but the client may not grant an exclusive license to a third party without the vendor's consent.[123]	No, unless permitted under the license agreement.
Germany	Patent	No, absent an agreement to the contrary. If there is no agreement between the parties, the client may not grant a license to a third party without the vendor's consent.	Unclear as there is no recent case law on this. According to somewhat dated case law, an exclusive licensee can grant a sublicense unless otherwise agreed, and a non-exclusive licensee cannot grant a sublicense unless otherwise agreed.
	Copyright	N/A	No. German copyright law requires consent by the copyright owner.

(*Continued*)

118 A 'transfer of copyright ownership' is defined to include a 'mortgage . . . or hypothecation of a copyright or of any of the exclusive rights comprised in a copyright . . .'. 17 U.S. C. § 101
119 'The licensee had the burden of obtaining the licensor's consent before it could assign its rights, absent explicit contractual language to the contrary.' *Gardner v Nike, Inc.* 279 F.3d 774 (9th Cir. 2002).
120 Patent Act, art 73(3). Copyright Act, Art 65(2); Nakayama (n 106), 276. Further, client may not grant a (registered or ordinary) exclusive license to a third party without vendor's consent.
121 Nakayama (n 16) 545. The Copyright Act is silent on whether a licensee may grant a license to a third party without a licensor's consent, but provides that (only) the copyright owner may grant a license to a third party: Copyright Act, art 63(1).
122 However, the client may not grant an exclusive license to a third party without the vendor's consent because it would restrict the vendor's licensing right.
123 *Sybersound Records, Inc. v UAV Corp.* 517 F.3d 1137 (9th Cir. 2008).

7. Existing sublicense granted by the client (in the event of the vendor's insolvency): If the agreement between the vendor and client allows client to grant a non-exclusive license to a third party without the vendor's consent, and the client has granted a non-exclusive license to a third party, can such third party (the sublicensee) continue to use the patented invention after the vendor becomes insolvent and the IP is assigned to a third party (new IP owner)?

		The client is a joint owner	The client is a licensee
Japan	Patent Copyright	Yes. The existing sublicensee may assert its non-exclusive license against the new IP owner.	Yes. The existing sublicensee may assert its non-exclusive license against the new IP owner.
US	Patent	Yes, without any accounting of revenue to the third party.	Yes
	Copyright	Yes, but the client must account to the third party for the profits derived therefrom.	
Germany	Patent	Unclear. Iepends on the type of partnership that the vendor and client have formed to govern the joint ownership.	Unclear, but probably yes in accordance with Federal Supreme Court case law.[124]
	Copyright	N/A	German copyright law requires consent by the copyright owner. If the vendor consented to grant of the sublicense: probably yes in accordance with Federal Supreme Court case law.[125]

8. Future sublicense granted by the client (in the event of the vendor's insolvency): If the agreement between the vendor and client allows the client to grant a non-exclusive license to a third party without the vendor's consent, can the client grant a new non-exclusive license to a third party after the vendor becomes insolvent and the IP is assigned to a third party (new IP owner)?

		The client is a joint owner	The client is a licensee
Japan	Patent	Unclear, but probably yes. Since the vendor may not assign its joint ownership interest without the client's consent, the new IP owner would need to agree to be bound by the existing agreement, which allows the client to grant a new non-exclusive license to a third party.	No, unless the new IP owner is bound by the agreement. The client's licensing right is a mere contractual right against the vendor and cannot be asserted against the new IP owner unless the new IP owner agrees.
	Copyright	Unclear. When the vendor obtains 'quasi consent', it becomes unclear whether the new IP owner is bound by the agreement. If the new IP owner is not bound by the agreement, the client may not grant a new non-exclusive license to a third party without the new IP owner's consent.	

(*Continued*)

124 Federal Supreme Court, 19 July 2012, [2012] GRUR 914 – *Take Five*; Federal Supreme Court, 19 July 2012, [2012] GRUR 916 – *M2Trade*; the court allowed a sublicensee to retain the right to use the licensed IP right even though the IP right owner terminated the primary license agreement.
125 ibid.

US	Patent	Yes, without any accounting of revenue to the third party.	No, unless the trustee assumes the IP (then the parties' relationship remains the same) and sublicensing is permitted under the license agreement.
	Copyright	Yes, but the client must account to the third party for the profits derived therefrom.	
Germany	Patent	Unclear. Depends on the type of partnership that vendor and client have formed to govern the joint ownership.	Unclear. Depends on whether or not the court allows the trustee to terminate the primary license between vendor and client.
	Copyright	N/A	

9. Specific performance (in the event of the vendor's insolvency): If the client has a right to demand the vendor's specific performance under the agreement between the vendor and client, can the client assert such right against the new IP owner if the vendor becomes insolvent and the IP is assigned to the new IP owner?

		The client is a joint owner	The client is a licensee
Japan	Patent	Unclear. Since the vendor may not assign its joint ownership interest without the client's consent, the new IP owner would need to agree to be bound by the existing agreement, which allows the client to enforce its right against the third party. However, if, by its nature, the obligation can only be performed by the vendor, then such obligation cannot be enforced against the new IP owner.	No, unless the new IP owner is bound by the agreement. The client's right is a mere contractual right against the vendor and cannot be asserted against the new IP owner unless the new IP owner agrees.
	Copyright	Unclear. When the vendor obtains 'quasi consent', it becomes unclear whether the new IP owner is bound by the agreement. If the new IP owner is not bound by the agreement, the client may not be able to seek specific performance as a remedy. Further, specific performance may not be asserted against the new IP owner if, by its nature, the obligation can only be performed by the vendor.	
US	Patent	No. A court declined to order specific performance for four reasons, one of them is that the assignee was not a party to the agreement.[126]	Maybe yes.[127] Although many courts have held that a patent is (by statute) to be treated as personal property and there can be no covenants that run with the patent,[128] there is also a court decision stating that encumbrances related to the actual use of the patent are deemed to run with that right to exclude.[129] Nevertheless, this encumbrance theory is not consistently applied. For example, courts have

(*Continued*)

126 *Richardson Shoe Machinery Co. v Essex Mach. Co.* 207 Mass. 219, 225 (1911).
127 *Superior Testers, Inc. v Damco Testers, Inc.* 309 F. Supp. 661 (D. C. La. 1970). The court granted an injunction against a patent assignee, holding that the assignee could not compete with the licensee, as use was concerned.
128 *Jones v Cooper Indus., Inc.* 938 S.W.2d 118, 123 (Tex. App. 1996); see also 35 U.S.C. § 261 ('[P]atents shall have the attributes of personal property'); *Pressure Sys. Int'l v Airgo IP, LLC*, 2010 WL 3430859 (S.D. Tex. 2010) ('agreements about patent rights do not run with the patents; they are also personal').
129 *Innovus Prime, LLC v Panasonic Corp. & Panasonic Corp.* 2013 WL 3354390 (N.D. Cal. 2013).

			held that arbitration clauses,[130] confidentiality provisions[131] and royalty rights[132] do not automatically run with the patent.
	Copyright	Probably not. However, possible if the terms of the joint ownership agreement were included within the software. The new IP owner could be deemed to have notice of such agreement and, therefore, the terms that call for actions or restrictions that are in regard to the software could be binding upon the new IP owner.	Probably not. However, it is possible if the terms of the license were included within the software. Although a line of cases have held that burdens do not run with a transfer of chattel property,[133] restrictions on products that run software (software-embedded goods) are recognized.[134] The Court of Appeals for the 9th Circuit has held that the prohibitions against bots and unauthorized third-party software were covenants rather than copyright-enforceable conditions.[135] Accordingly, non-possessory interests of a software system could interfere with the rights of the new IP owner to use the system. However, the attempt to create new common law servitudes on software license agreements has been criticized by some commentators.[136]
Germany	Patent	No, unless the know-how, etc. that enables specific performance has been generated by a separate (not-insolvent) joint venture or if the client attached a security interest to such know-how prior to insolvency.	No
	Copyright	N/A	
10. Injunction by the client: Can the client seek an injunction through court against an infringer without involving the vendor?			
		The client is a joint owner	The client is a licensee
Japan	Patent Copyright	Yes. The client can file an infringement lawsuit without involving the vendor.[137]	No[138]

(*Continued*)

130 *Datatreasury Corp. v Wells Fargo & Co.* 522 F.3d 1368 (Fed. Cir. 2008).
131 *Paice LLC v Hyundai Motor Co.* 2014 WL 3533667 (D. Md., 2014).
132 *In re Particle Drilling Techs.* 2009 WL 2382030 (Bankr. S.D. Tex., 2009).
133 'It is a general rule of the common law that a contract restricting the use or controlling sub-sales cannot be annexed to a chattel so as to follow the article and obligate the sub-purchaser by operation of notice. A covenant which may be valid and run with land will not run with or attach itself to a mere chattel': *John D. Park & Sons v Hartman*, 153 F. 24 (6th Cir. 1907).
134 The court held that while the terms of the license were included within the package, its terms afforded the purchaser an opportunity to review the product and its terms before being bound. 'Since the license agreement was a two-party contract, it was not equivalent to the rights of copyright': *ProCD, Inc. v Zeidenberg* 86 F.3d 1447, 1452 (7th Cir. 1996).
135 *MDY Indus., LLC v Blizzard Entm't, Inc.* 629 F.3d 928, 937 (9th Cir. 2010).
136 'Problems with notice, externalities, and unanticipated future impacts are no less severe than they are in the personal property contexts in which they originally arose': Molly Shaffer Van Houweling, 'The New Servitudes' (2008) 96 Georgetown Law Journal 927.
137 Nakayama (n 16) 335; Copyright Act, art 117(2).
138 Nakayama (n 16) 550; Nakayama (n 106) 728.

US	Patent	In principle no. The client may enforce the patent against a third party only upon the joinder of the vendor in a patent infringement action.	No, unless the client is granted all substantial rights.[139]
	Copyright	Unclear. The client is able to file a suit on his own behalf for an injunction only if the court does not consider the vendor as an indispensable party.[140]	No[141]
Germany	Patent	Yes. The client can file an infringement lawsuit in its own name.	No
	Copyright	N/A	No
11. Damage claims by the client: Can the client seek compensation of damages against an infringer without involving the vendor?			
		The client is a joint owner	The client is a licensee
Japan	Patent	Yes. The client can file an infringement lawsuit without involving the vendor.	No, unless the client is an exclusive licensee.[143]
	Copyright	The client can seek damages corresponding to its joint ownership interest.[142]	
US	Patent	In principle no. The client may enforce the patent against a third party only upon the joinder of the vendor in a patent infringement action.	No, unless the client is granted all substantial rights.[144]
	Copyright	Unclear. The client is able to file a suit on his own behalf for an injunction only if the court does not consider the vendor as an indispensable party.	No[145]
Germany	Patent	Yes. The client can file an infringement lawsuit in its own name. However, damages have to be paid to the client and vendor and distributed between the client and vendor.	No
	Copyright	N/A	No
12. Invalidation action by the client (only applicable to patents): Can the client respond to an invalidation action filed by a third party without involving the vendor?			
		The client is a joint owner	The client is a licensee
Japan	Patent	No. An invalidation action must be filed against all joint owners.[146]	N/A
US	Patent	Yes, and in infringement actions where invalidity claims are usually raised, the client can join the vendor (even if the vendor is involuntary) as a co-plaintiff responding to the invalidity defense assertion under FRCP Rule 19(b),	
Germany	Patent	No. An invalidation action must be filed against all joint owners in terms of a compulsory joinder of the parties.	

(*Continued*)

139 *Propat Int'l Corp. v Rpost US, Inc.* 473 F.3d 1187, 1189 (2d Cir. 2007).
140 *Key West Hand Fabrics, Inc. v Serbin, Inc.* 244 F. Supp. 287 (S.D. Fla. 1965), *aff'd*, 381 F.2d 735 (5th Cir. 1967); but see also *Edward B. Marks Music Corp. v Jerry Vogel Music Co.* 140F. 2d 268 (2d Cir. 1944); *Marvel Characters, Inc. v Kirby*, 726 F.3d 119 (2d Cir. 2013).
141 *Nafal v Carter* 540 F. Supp. 2d 1128, 1135 (C.D. Cal. 2007), *aff'd unpub.*, 388 Fed. Appx. 721 (9th Cir. 2010).
142 Nakayama (n 16) 333; Copyright Act, art 117.
143 Nakayama (n 16) 546. Nakayama (n 106) 776.
144 A patent owner should be joined, either voluntarily or involuntarily, in any patent infringement suit brought by an exclusive licensee having fewer than all substantial patent rights: *Intellectual Prop. Dev., Inc. v TCI Cablevision of Cal., Inc.* 248 F.3d 1333, 1336 (Fed. Cir. 2001).
145 *Fathers& Daughters Neveda, LLC v Lingfu Zhang* 284 F. Supp. 3d 1160, 1164 (D. Or. 2018).
146 Patent Act, art 132(2).

13. Prosecution by the client (only applicable to patents): Can the client file an application for patent registration without the vendor's consent? In many cases, the vendor and client agree in the software development agreement that they jointly own the IP in the software, including the right to apply for patents. If the client later wishes to apply for patent registration but the vendor does not cooperate, the client may wish to file an application in its own name.

		The client is a joint owner	The client is a licensee
Japan	Patent	No. The client may not file an application for patent registration without the vendor's consent.[147]	N/A
US	Patent	No. The client and vendor shall apply for patent jointly and each make the required promise.[148]	
Germany	Patent	Yes. However, the vendor (who has not filed the application) may bring an action against the client seeking the grant of joint ownership of the patent.	

Source: Prepared by authors

147 Patent Act, art 38.
148 35 U.S.C. § 116(a).

assistance may be affected by force majeure events if, for example, they involve technical staff visiting a licensee's site (such as travel restrictions due to COVID-19). In these circumstances, the parties can also explore the provision of technical assistance via technologies such as video and web conferences. In some cases, the licensor may want to convert an exclusive license to a non-exclusive license if a licensee is affected by a force majeure event. Such a clause is also worth considering.

From the licensee's perspective, a licensee may not want to pay the minimum royalty if it is affected by a force majeure event. The release from this obligation needs to be specifically addressed in a force majeure clause.

VII. Conclusion

Before the Patent Act and the Copyright Act were amended to offer protection to licensees in the event of a licensor's insolvency, IP users had a strong preference for joint ownership with the IP developer. However, joint ownership in IP may be risky and unpredictable compared to a non-exclusive license, especially when the IP covers multiple jurisdictions. We have discussed why IP users should reconsider whether to rely on joint ownership or to opt for a non-exclusive license. We are not saying a license is the perfect answer; there are a number of unresolved issues remaining in the context of a licensor's trustee assigning a patent or copyright to a third party. We strive to address these issues as much as possible in drafting and negotiating IP license agreements. Using one's imagination when drafting and negotiating the agreement will save the time and effort of companies coping with difficult situations.

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