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A Three-Step Test for Determining Patent Infringement Related to Repair

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Abstract Repair, refill and recycle (in the following: repair) of physical goods is a necessity and a convenience – mending is better than ending, at least for the consumer. Where the goods to be repaired are patented, the question arises whether such act of repair infringes the patent, and under what conditions. There are different approaches by national courts on this matter, and it will eventually be the task – and the chance – of the Unified Patent Court to find its own solution to this issue. The author in this regard proposes a three-step test.

Keywords Right to repair · Patent infringement · Exhaustion · Unified Patent Court · Physical and intellectual property · Implied licence

1 On the Right to Repair

In a recent contribution,¹ the author has given an overview of the current discussion related to the right of repair and the potential conflicts with intellectual property rights. This article analysed three Japanese decisions that have dealt with an antitrust defence to attempts by the patent owner to prevent acts of refill. The purpose of the current contribution is to show that a sensible interpretation of patent limitations – here the concept of exhaustion – already goes some way towards

¹ Furuta and Heath (2023), p. 1053.

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permitting acts of repair and refill, and that considerations extraneous to patent law only need to be subsidiarily considered.

2 Physical Property and Intellectual Property

When patented products are sold, ownership in the physical product changes, while ownership in the intellectual property does not. As this situation would greatly inconvenience the acquirer of the physical object, two solutions have been found to accommodate the interests of both patentee and owner of the product.

a) The first is the doctrine of implied licence as decided by the Privy Council in 1911 in a case litigated in Australia. According to the court,

[...] it is open to the patentee, by virtue of his statutory monopoly, to make a sale sub modo, or accompanied by restrictive conditions which would not apply in the case of ordinary chattels; [...] the imposition of these conditions in the case of sale is not presumed, but, on the contrary, a sale having occurred, the presumption is that the full right of ownership was meant to be vested in the purchaser while [...] the owner's rights in a patented chattel would be limited, if there is brought home to him the knowledge of conditions imposed, by the patentee or those representing the patentee, upon him at the time of sale.²

b) The second is Josef Kohler's exhaustion doctrine³ based on the idea that a patentee after the first commercial marketing has "exhausted" its patent monopoly for this product and may no longer control further acts of commercial marketing. This doctrine was adopted by a US Supreme Court in 2017, as follows:

Exhaustion is a separate limit on the patent grant, and does not depend on the patentee receiving some undefined premium for selling the right to access the American market. A purchaser buys an item, not patent rights. And exhaustion is triggered by the patentee's decision to give that item up and receive whatever fee it decides is appropriate. [...] The patentee may not be able to whatever fee it decides is appropriate "for the article and the invention which it embodies" command the same amount for its products abroad as it does in the United States. But the Patent Act does not guarantee a particular price, much less the price from selling to American consumers. Instead, the right to exclude just ensures that the patentee receives one reward – of whatever amount the patentee deems to be "satisfactory compensation," for every item that passes outside the scope of the patent monopoly.⁴

c) In 2020, more than 100 years after the Privy Council's decision, the Australian High Court (which is the highest court in Australia at federal level), had a chance to

² Privy Council, *National Phonograph Company of Australia Ltd. v. Menck*, 3 February 1911, [28] R.P.C. 229, 248.

³ Kohler (1900), p. 452.

⁴ US Supreme Court, *Impression Products v. Lexmark International*, 30 May 2017, 581 US.____ (2017).

revisit the issue and compared the doctrine of implied licence with the exhaustion doctrine. In the case at issue, the seller had imposed limitations to the export on the goods, for which reason the two doctrines made a difference: Under the doctrine of implied licence, importation would not be possible because of the explicit contractual limitation, while under the doctrine of exhaustion, importation would be possible. According to the court,

The exhaustion doctrine has the virtues of logic, simplicity and coherence with legal principle. It is comprehensible and consistent with the fundamental principle of the common law respecting chattels and an owner's rights respecting their use. At the same time, it does not prevent a patentee from imposing restrictions and conditions as to the use of a patented product after its sale but simply requires that they be obtained by negotiation in the usual way and enforced according to the law of contract or in equity.

The implied licence doctrine is complicated in its operation and effects. It can achieve only a partial alignment with the fundamental principle of the law and then only when it is clear that no restrictions have been imposed at the point of first sale [...] The implied licence doctrine is not consistent with the certainty demanded by trade and commerce or with consumer expectations.⁵

The court came to this conclusion after a very thorough analysis of the doctrine of implied licence and ultimately found that the doctrine was based on a misunderstanding of what a monopoly right should confer on the patentee: Not an inseparable right over each physical product that was sold under a patent, but the possibility of reward.

3 The Toner Cartridge Cases

It is no coincidence that the above US and Australian cases concerned recycled toner cartridges. The repair of patented products often lies along the fault line of permissible repair and impermissible reconstruction. Cases from four different jurisdictions may serve to illustrate this point.

a) In the **US Supreme Court** case, the plaintiff Lexmark sold patented toner cartridges for use with laser printers. The used cartridges were refilled by the defendant Impression Products for resale and re-use. In an endeavour to meet this competition Lexmark offered discounts to customers who agreed to use the cartridge only once and not to transfer the empty cartridge to anyone but Lexmark.

⁵ High Court of Australia, *Calidad Pty Ltd v Seiko Epson Corporation*, 12 November 2020, [2020] HCA 41, paras.76, 77, 84. The cited passages are from the majority opinion written by three of the seven judges. One other judge concurred with the conclusions and added the following considerations: "The exhaustion of rights doctrine has a lineage that is decades longer than the lineage of the implied licence doctrine. It has been shown by repeated application in the United States to be workable and coherent. It sets clear statutory boundaries. It respects longstanding common law principle. It does not need to enlist equity in some way to prop it up. It strikes an appropriate balance between the interests of patentees and the owners of patented products." Three judges differed and wanted to uphold the implied licence doctrine. With 4:3 votes, the decision was thus a rather close call.

It installed a microchip on each such cartridge that prevented re-use. The defendant developed methods to circumvent the microchip.

b) In the **Australian High Court** case, the plaintiff (and respondent on appeal) Seiko supplied replacement Epson cartridges for its printers. Third-party suppliers obtained original Epson cartridges which were empty and supplied them to the defendant Ninestar, which modified and refilled them for re-use.

c) In the **Japanese Canon Ink Jet** case,⁶ the plaintiff owned two patents, an apparatus patent (claim 1) on an ink tank for inkjet printers (“patented products”) and a method patent (claim 10) for the manufacture of the patented products. Re-use was made by drilling a vent on the top surface of the liquid ink storage room of the ink tank bodies, rinsing them, drying them, refilling ink through the vent, plugging the vent, putting labels on the products, and thus producing commercialised recycled products by re-utilising the used-up patented ink tank bodies.

d) In the **German Drum Unit** case,⁷ the defendant sold recycled process cartridges that could be used in place of the plaintiff’s original cartridges. For recycling, the defendant took used cartridges that were originally put on the market by the plaintiff and replaced the expended image drum and, if necessary, the flange with new, functionally identical parts that did not stem from the plaintiff. The plaintiff’s patent related to an electrophotographic drum unit with a coupling member that solved the technical problem of simplifying the mounting and demounting of the cartridge. The feature distinguishing the unit from prior art was thus the coupling member that facilitated the exchange of cartridges.

4 Approaches to Reconstruction, Repair and Recycle

The approaches in determining whether an act amounts to a permissible repair or recycle, or an impermissible making, are different amongst different jurisdictions (and even courts within the same jurisdiction). The Japanese Supreme Court, just as the courts in the UK and Germany, have applied a “multi-factor” test that usually takes as its starting point the patented article and how this is presented.

a) The **Japanese Supreme Court** took the following position:

In order to determine whether a patented product was newly manufactured, it is appropriate to decide this issue by taking into account the entire circumstances, including the attributes of the patented product, the content of the patented invention, the manner in which the product was modified or its parts were replaced, and the actual conditions of the sales transaction, etc. In regard of the issues that have to be considered, it has to be said that the attributes of the patented product include the product’s functions, the structure and material[s], the intended use[s], the lifespan, and the manner in which it is used, and that in regard of the manner in which the patented product was modified or its parts were replaced, such consideration shall include the

⁶ Japanese Supreme Court, 8 November 2007, English version in IIC 39:982 (2008) – *Canon Ink Cartridge*.

⁷ German Federal Supreme Court, 24 October 2017, English version in IIC 49:972 (2018) – *Drum Unit*.

condition of the patented product after it was modified etc., the content and the degree of the modification, the lifespan of the replaced parts, and the technical function and economic value of the replaced parts in the patented product.

b) The **UK Supreme Court**⁸ in a case that concerned a bottle protected by a container and where the inventive concept was expressed in the container, the court held the following:

Deciding whether a particular activity involves “making” the patented article involves, as Lord Bingham said, an exercise in judgment, or, in Lord Hoffmann’s words, it is a matter of fact and degree. In some such cases, one can say that the answer is clear; in other cases, one can identify a single clinching factor. However, in this case, it appears to me that it is a classic example of identifying the various factors which apply on the particular facts, and, after weighing them all up, concluding, as a matter of judgment, whether the alleged infringer does or does not “make” the patented article. In the present case, given that (a) the bottle (i) is a freestanding, replaceable component of the patented article, (ii) has no connection with the claimed inventive concept, (iii) has a much shorter life expectancy than the other, inventive, component, (iv) cannot be described as the main component of the article, and (b) apart from replacing it, Delta does no additional work to the article beyond routine repairs, I am of the view that, in carrying out this work, Delta does not “make” the patented article.⁹

c) The **German Federal Supreme Court**¹⁰ has not been consistent in its case law, yet puts emphasis on public opinion in this regard in that:

[...] if the replacement of certain parts is part of the intended use of a patented article, [...] such replacement may also be performed by competitors that obtain the product in a condition that requires repair, and after the repair sell the product to third parties. Whether the inventive concept is particularly embodied in the replaced parts is usually only of importance if their exchange would have been anticipated during the lifespan of the products. In order to determine this, it must be ascertained whether the interested circles in commerce regard such replacement as a usual measure of maintenance that does not call into question the identity of the assembly as an object of commerce.

This was confirmed in the *Drum Unit* decision:

In assessing the question of whether the replacement of parts of an apparatus put into circulation with the permission of the patent holder falls under intended use or represents a new manufacture, the protected product must be considered as a decisive point of reference. Only where there is no public

⁸ UK Supreme Court, 13 March 2013, *Schütz (UK) Limited v. Werit (UK) Limited*, [2013] UKSC 16. Available at the Court’s HP <https://www.supremecourt.uk/cases/docs/uksc-2011-0159-judgment.pdf>.

⁹ *Idem. Schütz v. Werit*, para. 78.

¹⁰ German Federal Supreme Court, 17 July 2012, GRUR 2012, 1118 – *Palettenbehälter II*.

opinion does the court consider whether the technical results of the invention are reflected in precisely the replaced parts.¹¹

5 Analysis

There are practical and doctrinal reasons why the above approach is inappropriate.

a) As to the practical reasons, the common understanding, as understood by the above courts, always refers to the product as sold. This may embody the invention, but not necessarily correspond to it. E.g. would it make a difference for patent infringement if the (patented) cartridge was sold by the patentee in a single-use or a multiple-use cartridge? Public perception would be different as to the commercial life of either, while the invention remained the same. Second, public perception may well depend on how the patentee presents its products. Particularly in the case of new products, the intention of the patentee may well influence public perception about the product's life span and way of use. Third, the court's reasoning creates a legal uncertainty that would prevent many small and medium-sized enterprises (repair/refill businesses are mostly in this range) from engaging in activities whose lawfulness they may only be able to determine by the look into a crystal ball: Suffice to say that in the Japanese case, the first instance court and the Supreme Court based on very similar criteria came to different conclusions. In the German case, both the first and second instance court found for infringement, while the Supreme Court did not. In addition, one cannot help but note that the criteria as applied by, e.g. the Japanese and the German Supreme Court are not the same. This is of little surprise as a clear compass seems to be missing.

Even more important are the doctrinal reasons why the above position is problematic.

b) For the doctrinal reasons, we must go back to the distinction between exhaustion and implied licence. The reason for the High Court of Australia to discuss this distinction was that an implied licence extends beyond the use of the patented product in the form in which it comes into the hands of the first owner, while exhaustion does not. This is why the previous instance court in Australia had found infringement already for the fact that the cartridges were sold with a "single use" limitation, but were then modified to be re-used.

c) The doctrine of implied licence is not an exhaustion doctrine by another name. It is something fundamentally different. The whole question in the old English case of *National Phonograph* as decided by the Privy Council¹² was about the alignment of property and industrial property: While the purchaser of a physical object would obtain title by the sale, the object of industrial property, in other words the monopoly, remains unchanged and unaffected. It does not expire, it does not change hands, and it remains as enforceable as before. The referral in *National Phonograph* came from Australia, and the heart of the disagreement between the judges back in 1910 was exactly that: Could the courts without a legislative basis limit the rights

¹¹ German Federal Supreme Court, 24 October 2017, as above – *Drum Unit*.

¹² English Privy Council, *Nat'l Phonograph Co. of Austl. Ltd. v. Menck*, [1911] 28 R.P.C. 229 (P.C.) 247.

conferred under the Statute of Monopolies. The Privy Council ultimately ruled that the judges could not do something that radical. Rather, they came up with the construct that the buyer was presumed to obtain a licence from the patentee in regard of acts that would otherwise be considered infringing. But that this presumption could of course be refuted by evidence to the contrary: Retention of title, notices, physical impediments to limit the use, in other words all those factors that the Japanese and German courts have used to determine permissible repair. Or, worded differently, the Japanese and German courts with this approach have tried to determine whether there was exhaustion by finding whether there was an implied licence. This is exactly what Josef Kohler wanted to avoid when coming up with the exhaustion theory: *The question of whether there is an implied licence only becomes relevant when there is no exhaustion, and exhaustion cannot be determined by analysing whether the patentee should be considered as having granted an implied licence. Exhaustion overrules any intentions of the patentee, as it is an objective limit to the patent right.*

6 A Three-Step Test Solution

The author would propose a *three-step test* in order to distinguish permissible repair from impermissible reconstruction:

a) In order to determine whether an act of use amounts to a making, the first step must always be the patent claim rather than the product the patentee has put on the market, because exhaustion requires a comparison between the patent and a product on the market, rather than a comparison between one product and another product.

Reconstruction (in other words “making”) must always be determined in the light of the technical contribution or achievement as expressed in the patent: The exchange of a part that bears no relation to such contribution or achievement cannot be deemed infringing.¹³ This first stage of the test corresponds to the **US approach** in regard of the exchange of spare parts. The leading cases for distinguishing permissible repair from impermissible reconstruction are two Supreme Court cases: *Aro I* and *Aro II*. *Aro I* is most interesting in that it clearly highlights that parts without any inventive merit can be replaced without limitation. In these two cases, the patent covered the combination, in an automobile body, of a flexible top fabric, supporting structures, and a mechanism for sealing the fabric against the side of the automobile body to keep out the rain. The defendant had replaced the fabric only. According to the Supreme Court, the patent did not confer a monopoly over the fabric or its shape, which the Court considered but an unpatented element. Further, a car owner would not infringe the combination patent by replacing the worn-out fabric of the patented convertible top on his car, since such a replacement by the car owner is a permissible “repair” and not an infringing “reconstruction”, regardless of whether the intended use was known to the sellers or not. The Supreme Court thereby established the rule that unless one element of a combination patent was

¹³ Heath and Mōri (2006), pp. 856–864.

separately patented or patentable, its replacement could not amount to infringement, however essential the element may be.¹⁴ Thus:

- where a part is exchanged that is not a feature in the patent claim, there can never be infringement;
- where a part is exchanged that is part of the patent claim (e.g. an apparatus claim comprising the feature), the question would be whether this part would be patentable as such, or whether this part embodies the feature that distinguishes the invention from prior art.

In the German *Drum Unit*¹⁵ decision, the court arrived at this conclusion, but only by default because there was no public perception in regard of the use of the apparatus:

When a patent claim protects a product consisting of several parts and yet the patent holder only puts objects on the market that encompass yet further components, and thus an actual opinion of the relevant public with regard to the protected product cannot be ascertained, the delineation between intended use and new manufacture must be based solely upon whether the technical results of the invention are reflected in precisely the replaced parts.

In similar fashion, the Düsseldorf District Court denied reconstruction for the replacement of coffee capsules in an apparatus claim for a coffee machine that featured the capsules as a feature of the claim:

The rights of the applicant to its invention are exhausted by the sale of the Nespresso machine [...]. In principle, it must be assumed that the exchange of a part that frequently needs replacement during the lifespan of the machine cannot be considered a reconstruction of the machine [...] while the capsule acts in functional conjunction with the other elements of the patented invention [...] the inventive achievement is not particularly mirrored in the capsules. Neither is the technical advantage of the invention realised in the capsules [...], and the advantage of the invention is not realised in the sense that the invention would positively influence the function or duration of the capsules [...] Finally, in order to balance the conflicting interests involved it cannot be decisive that the capsules, rather than the coffee machine possibly represent the economic focus of the invention by the expected need to replace them. After all, such intention of commercial use can only be protected if the technical advantages of the invention are particularly mirrored in the capsules, which is not the case [...].¹⁶

Also in the above UK case, the inventive concept was not expressed in the part that was exchanged. Consequently, there was no reconstruction.

In the Japanese *Canon Ink Jet Cartridge* case, the inventive concept was a liquid (in particular ink) containing chamber with a partition wall separating the liquid

¹⁴ US Supreme Court, *Aro Mfg. Inc. v. Convertible Top Replacement*, 365 U.S. 336 (1961) (*Aro I*).

¹⁵ German Federal Supreme Court, 24 October 2017, IIC 49:972 (2018) – *Drum Unit*.

¹⁶ Düsseldorf District Court, case 4b O 82/12, 16 August 2012, *Nestec S.A. v. Ethical Coffee*,

containing chamber from the negative pressure generating member housing chamber and a passageway that connects both chambers with each other, while the first of the two negative pressure generating members is located closer to the passageway connecting to the liquid containing chamber, and the second closer to the vent, in particular characterised in that:

- [...],
- the pressure between the two negative pressure generating members generates a stronger absorption of the boundary layer than the absorption of each of the negative pressure generating members the negative pressure generating member housing chamber is filled with a sufficient amount of liquid so that the entirety of the boundary layer can hold liquid regardless of what position the liquid containing vessel may be in [...].

The ink as such was a feature of the claim, but there was nothing inventive about it. But instead of focussing on this fact, the Japanese Supreme Court looked at factors such as the necessity of drilling a hole when replacing the ink, etc.

Under the exhaustion concept, all this is not only unnecessary, but also misguided, because it allows the patentee to retain continuing rights over the marketed products, something that the exhaustion doctrine denies the patentee after the act of first marketing.

Even where the part that embodies the inventive merit is exchanged, it needs to be ascertained that such an exchange is actually infringing: Where in the above coffee machine case, the coffee pads are patented, an exchange of the pads is only infringing if the replaced pads are made in accordance with the invention, or in the case of patented ink for the toner cartridges, where the ink that is refilled is ink that falls under the claims. However, in the case at issue the patentee also had a process patent for the manufacture of ink cartridges. The Supreme Court did not examine whether this was infringed as well. This would have been necessary because there is no automatic exhaustion of a process patent if the product patent is exhausted (see below).

There are two further points that should be clarified:

First, the exhaustion concept is unrelated to the concept of property ownership under civil law. This means that the patentee cannot avoid exhaustion by merely renting, rather than selling, patented products. Even rental (or even free give-away) allows the patentee the possibility to obtain a profit: In this regard, the Agreement on a Unified Patent Court in Art. 29 refers to products that have been “placed on the market”.

Second, the burden of proof for exhaustion in regard of replaced or recycled items is on the patentee, because the patentee must prove that the re-use or recycle amounts to a making. In other words, it is the patentee who must prove that in regard of goods that have been put on the market by the patentee, exhaustion does not apply (because the act of marketing by the patentee is a presumption of exhaustion).

b) Implied licence. The question of an implied licence can only become relevant in the absence of exhaustion. The question to be asked is therefore: Can a user expect to be entitled to commit an otherwise infringing act? Josef Kohler has given

the example of a patented machine that performs a process that is also patented (e.g. a patented telegraph that is used for the patented process of transferring messages).¹⁷ While the sale of the machine does not exhaust the process patent, “the question can arise whether the marketing of the machine by the owner of the process patent also implies a licence, especially when the machine can predominantly or only be used for implementing this process”. Whether there is such an implied licence must be determined according to the concrete circumstances. In the above Japanese case, the process patent need not be used when making photocopies, so an implied licence cannot be inferred (for the case that the process patent is indeed infringed by the refill of ink).

Another case of implied licence could be the one argued in the German *Drum Unit* case. Here, the patentee concluded a voluntary agreement with other suppliers in which it committed to adhering to certain standards for the purpose of environmental protection. This was done in order to avoid legislation by the European Commission. The relevant commitment reads as follows:

4.4 Cartridges

For all products placed on the market after 1 January 2012:

4.4.1 Any cartridge produced by or recommended by the OEM for use in the product shall not be designed to prevent its reuse and recycling.

4.4.2 The machine shall not be designed to prevent the use of a non-OEM cartridge.

The requirements of paragraph 4.4 shall not be interpreted in such a way that would prevent or limit innovation, development or improvements in design or functionality of the products, cartridges, etc.

The court held that third parties could not rely on this commitment:

From the perspective of a knowledgeable third party there is admittedly the justified expectation that the parties to the agreement will adhere to the commitments made therein, so as to avoid the issuing of compulsory measures by the Commission. At the same time, however, it is clear even to an outside observer that in the case of non-adherence to commitments, the sanctions provided for in the agreement – and if necessary an intervention on the part of the Commission – will settle the matter, and that an enforcement of whatever kind by third parties is not provided for.

As the court affirmed exhaustion, the point was not decisive. But had it been, the court was wrong to deny the binding force of this declaration: A commitment to avoid legislation should be regarded as a bar to enforcement regardless of whether it was meant to protect third parties or not. One can, however, argue whether the pledge that capsules “not to be designed to prevent reuse” should only be understood in the technical sense as a pledge to manufacture products, or as a pledge not to sue. A point the court should have clarified.

¹⁷ Kohler (1900), pp. 457, 458.

Different from exhaustion, an implied licence must be invoked by the alleged infringer as a defence. It is not on the patentee to prove the absence of an implied licence, but on the alleged infringer to prove such licence.

c) *Ordre public*/abuse of right. The third and final step in the infringement analysis of repair and recycle is the denial of enforcement due to an abuse of rights.¹⁸ Such an abuse of rights may be considered, e.g. where the enforcement of the patent conflicts with the principles of fair competition. In the recent Japanese *Ricoh* cases,¹⁹ the plaintiff and toner manufacturer Ricoh had protected its cartridges with a chip that caused a malfunctioning of the cartridges when they were re-filled. The defendants dismantled the chips from the plaintiff's toner cartridges designed for the plaintiff's printers, replaced the chips with those of the defendants', refilled toner and sold the cartridges as recycled toner cartridges. As the chips were patented, there was no question of exhaustion. Rather, this was a clear case of manufacture. Neither could it be said that the patentee had given an implied licence (this could be argued had the patentee given an undertaking as in the German *Drum Unit* case). Both courts held that measures taken by the patent right holder to restrict the further circulation such products must be necessary and reasonable so as to justify such a re-use restriction. Otherwise, the patentee would be barred from enforcing the patent due to an unlawful tie-in sale or an undue hindrance of competitors.

Already in a previous case, the Japanese Fair Trade Commission had taken the position that in a case where a printer manufacturer obstructed the rewrite of an IC chip and made the recycling of cartridges impossible without good reason such as technical necessity, or beyond the necessary scope, or where it recorded data of cartridge toner runs in an IC chip and disabled part of the laser printer functions when inserting recycled goods, this would amount to an unfair interference with the business of competitors.²⁰ In a more recent case, the Tokyo District Court had held that:

where technical measures (here: changing the circuit design of new printers) are implemented without technical necessity, yet in order to tie goods in the aftermarket by making previously compatible toner cartridges unusable, thereby creating the risk of excluding competitors from the market in the tied goods (here: toner cartridges), such measures amount to an unfair trade practice (here: unlawful tying) under the Antimonopoly Act.²¹

Different from *Brother*, in the *Ricoh* cases the cartridge would still function even without a replacement of the chip, but did not show the correct amount of remaining

¹⁸ That this principle should find application in patent over-enforcement cases has been advocated by Léonard (2019).

¹⁹ Tokyo District Court, 22 July 2020, Case No. 40337 (Wa) of 2017, English translation in GRUR Int. 2023, 876 – *Ricoh Toner Cartridge I*; Intellectual Property High Court, 29 March 2022, Case No. 10057 (Ne) of 2020, English translation in GRUR Int. 2023, 958 – *Ricoh Toner Cartridge II*.

²⁰ Japanese Fair Trade Commission, informal decision of 21 October 2004 in *re Canon*. https://www.jftc.go.jp/en/pressreleases/yearly_2004/oct/individual_000280.html.

²¹ Tokyo District Court, 30 September 2021, Case No. 35167 (Wa) of 2019, English translation in GRUR Int. 2023, 1099 – *Brother*.

toner. For the District Court, this was enough to consider them unusable, for the High Court, it was not. From a point of view of the consumer, it is clear that recycled products without a functioning indication of remaining toner are sub-standard goods, for which reason the district court decision seems to come closer to commercial reality.

In the European context, and this may become an issue for the UPC, Art 17 Charter of Fundamental Rights of the European Union protects intellectual property, but also provides that “Everyone has the right to own, use, dispose of and bequeath his or her lawfully acquired possessions”. While not unfettered, the lawfulness of obstructing repair by technical or legal means should be interpreted in the light of such right to use.

7 Final Remarks

In order to achieve a more circular economy, companies that engage in the business of repair, refill or recycle need legal certainty to operate. And companies that try to use their patents as leverage to block access to adjacent markets need to be given the clear message that such business model is not only undesirable, but also not enforceable. For both purposes, the above three-step test seems to an appropriate solution.

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