Ending is Better than Mending –
Recent Japanese Case Law on Repair, Refill and Recycle

Christopher Heath / Mineko Môri

I. Introduction
II. Trade Marks
III. Patents
   1. Issues of Domestic Exhaustion
   2. Issues of International Exhaustion
   3. Previous Case Law on Repair and Recycle
   4. Analysis

I. INTRODUCTION

The cases “Ink Ribbon”\(^1\), “Ink Bottle”\(^2\) and “Canon Ink Jet”\(^3\) highlight the increasing market share and economic importance of recycled products in Japan. “Ending is better than mending”\(^4\), if ever true in Japan, no longer reflects the taste and economic power of many consumers. This conflicts with the strategy of some appliance makers to reap their profits on the after-sales market. Ink bottles, ink ribbons, and cartridges are prime examples of such strategy far beyond the shores of Japan. In Japan, makers have tried to invoke patents or trade marks to prevent the advent of unwelcome recycles, not completely without success. In the following, both the trade mark and the patent angle are briefly examined.

II. TRADE MARKS

In Japan, case law back to the “Parker” decision in 1971\(^5\) is unequivocal in that marks serve as indications of origin. Acts that do not cause confusion as to the origin of goods

---

\(^4\) The phrase “ending is better than mending” was coined by Aldous Huxley in his satirical novel “Brave New World”, where the disposal of goods (“ending”) is regarded as socially more desirable than their repair (“mending”).

---
or services are not considered infringing.\textsuperscript{6} Along this reasoning, use of a mark that is not considered use in order to indicate an origin (i.e., no trade mark use), e.g. as an eye-catcher\textsuperscript{7} or cover title\textsuperscript{8} is not considered infringing, either. Confusion as to the origin arises where, either, the goods bearing the trade mark have not been put into circulation with the trade mark owner’s consent\textsuperscript{9}, or where the goods have been subsequently altered and commercially remarked without a clear indication as to the origin of such alteration. The latter issue comes into play for the cases of recycle. It appears that an alteration may also relate to the mere packaging rather than the goods as such\textsuperscript{10}, although the decided case is difficult to read in terms of a general rule. Where the goods have been altered, trade mark infringement depends on confusion as to the origin of such altered goods. In the “Ink Ribbon” case, such confusion was denied, although the ruling reads rather narrowly on the get-up of the cartridge at issue. The court, however, appeared to acknowledge that no particular consumer expectation about the commercial origin of replacement parts seemed to exist. These were as likely to come from the manufacturer of the original appliance, or from other sources. The court also made little of the plaintiff’s somewhat hapless argument that women and the elderly, those who were unfamiliar with English, were easy victims of confusion when it came to using electric appliances. In the “Ink Bottle” case, the Tokyo High Court found that there was confusion and read the facts somewhat differently from what the Tokyo District Court had ascertained. According to the Tokyo High Court, the defendant’s customers did not necessarily get back the same bottles that they had supplied to the defendant for refill. In addition, some of the defendant’s customers may not necessarily have participated in the refilling scheme, but bought refilled bottles from the defendant outright. The defendant had further failed to clearly indicate the origin of the refilled ink, or at least the fact that the bottles were no longer in their original state or filled with Riso’s ink. The High Court thus found that some customers (schools or government offices) believed they had received bottles with refills of Riso ink, which apparently was not the case. Yet which of the six criteria mentioned by the court was decisive for its view that the defendant infringed does not become very clear. What weight did the court attach to the fact that the defendant’s business was large? What relevance does it have that the unit of an enterprise or governmental body purchasing the refilled ink bottles sub-

\textsuperscript{6} One author has advocated a broader protection of trade marks under the notion of “guarantee” in addition to “origin” in order to protect the trade mark owner against the marketing of (his own!) sub-standard goods (K. TAMAI, in: Cipic Journal 164 (2005) 15). Tamai mostly uses US cases as a justification for this approach, yet fails to mention that in the US, the link between quality and origin of goods is indirectly protected by the requirement of transfer of business where a trade mark is transferred.

\textsuperscript{7} Osaka District Court, 24 February 1976, Mutai-shû 8-1, 102 – “Popeye”.

\textsuperscript{8} Tokyo District Court, 22 February 1995, Chizai-shû 27-1, 27 – “Under the Sun”.


\textsuperscript{10} Tokyo District Court, 26 March 2002, in: Hanrei Jihô 1805, 140 – “Viagra”.
sequently supplies these to other units? It might have helped to establish the following principles in order to find infringement:

1. use of the trade mark as an indication of origin rather than a badge, eye catcher or indication of compatibility;
2. no consent from the trade mark owner;
3. non-original goods (i.e. either goods that never originated from the trade mark owner, or original goods that were subsequently altered); and
4. consumer confusion as to the origin of the goods. “Consumer” is the purchaser rather than the actual user (this should have been clarified in the “Ink bottle” case). Confusion can be avoided by a notice (to be brought home to the end consumer) that the products have been altered and that such alteration is not attributable to the trade mark owner.

III. PATENTS

1. Issues of Domestic Exhaustion

More interesting and more complex are the patent law issues arising from alteration and recycle. Basis for determining infringement in this case is the Supreme Court’s “BBS” decision\(^\text{11}\) that made a not entirely convincing distinction between national and international exhaustion. Domestic exhaustion should be determined by the following principles:

“According to Sec. 68, Japanese Patent Act, a patentee shall have the exclusive right to work the patented invention commercially. In the case of a product invention, “working” means the acts of manufacturing, using, assigning, leasing, importing, or offering for assignment or lease of the product (Sec. 2(3)(i) Patent Act). Any person who has purchased products covered by a patented invention, either from the patentee or from a licensee with consent of the patentee, commits an act of use by re-selling these goods to a third party. Equally, such a third party who has obtained the patented products in such a way is, at least formally, working the patented invention when further leasing it, and would thus be liable for patent infringement. However, if patented products are sold domestically, either by the patentee or with his consent, the patent is deemed exhausted because it has fulfilled its purpose. The patent does not give rights to subsequent use of the patented product by acts of transfer or lease. First, patent law has to be understood as balancing the interests of invention protection, and the public benefit of society at large. Next, if a tangible object is transferred, the corresponding rights are obtained by the transferee, and the transferee obtains those rights that were originally vested in the transferor. Also insofar as patented products are distributed on the market, the transferee obtains an object from the patentee whose exercise of the right suggests that the right in further acts of re-sale has been transferred as well. If with respect to any acts of

---

\(^{11}\) Supreme Court, 1 July 1997, in: IIC 29 (1998) 331 – “BBS Car Wheels III”.
marketing patented products, the patentee’s consent were necessary each time a transfer occurs, the free movement of goods would be seriously impeded, the smooth distribution of patented products would be hampered and as a result, the interests of the patentee himself would suffer. This would run counter to the purpose of the Patent Act ‘to encourage inventions by promoting their protection and utilisation so as to contribute to the development of industry’ (Sec. 1 Patent Act). Finally, by making the invention available to the public, the patentee will have the opportunity to obtain the reward from selling the product or granting a licence for the use of the patent and thereby obtain a licensing fee. In order to protect the financial interests of the patentee who has made his invention public, it would not seem necessary to give the patentee or the licensee rights beyond the first act of marketing, as the patentee would then obtain an unnecessary double reward in the course of further distribution.”

2. **Issues of International Exhaustion**

International exhaustion, on the other hand, should not follow the above principles, but rather be determined by balancing patent rights with international trade:

“Some thought should be given to the relationship between the free movement of goods in international trade and the interests of the patentee. In our present day society, international trade and economy affect us very broadly and permit conditions of rapid development. Even in the case that goods are purchased abroad, imported into Japan and put into circulation in the domestic market, there is the need to create conditions for the free distribution of goods, including their importation. Even if economic transactions have been made abroad, as a general principle, the transferee obtains not only the object as such, but also the rights vested therein. In other words, the transferor transfers his rights. To enable such transactions and to set the conditions for international trade in modern day society, it is assumed that the patentee who has transferred the ownership of patented goods abroad has also endowed the transferee or any subsequent purchaser with the right to undertake further transactions with third parties, including the importation to Japan, use in Japan, and transfer of ownership on our domestic market.

Opposed to the above concept, a domestic patentee who markets patented products abroad and wishes to exclude their sale and use in our country by subsequent purchasers, has to make clear his intention of such a restriction when dealing with the transferee, and has to clarify such restriction on the patented goods for the benefit of subsequent purchasers. In the absence thereof, such acts cannot be understood as a use of the patent in Japan. That is to say:

(a) According to the above, if the patented products were marketed abroad, then it can be naturally expected that such goods may be imported into Japan if the patentee puts such goods into circulation abroad without any reservations at the time of transfer. The transferee or any other subsequent purchaser is understood to have purchased the product without any restrictions that might apply to such products in Japan.

---

(b) On the other hand, if the patentee reserves his rights at the date of transfer with respect to the use in Japan when selling the patented products abroad, at the time of transfer the patentee has agreed with the transferee that sale or use of the patented product should not be allowed in Japan. If clearly indicated on the products, such a restriction is also valid against subsequent purchasers of the patented product along the distribution chain even with a number of intermediaries. Here it is understood that the above products have been sold under certain restrictive conditions, and any purchaser is free if he wants to obtain products bearing such a limitation or not.

(c) In the case where the marketing activities abroad have been undertaken by an affiliated company, a subsidiary or a person with the same standing as the patentee, the case should be treated as if the patentee himself had marketed the patented products.

(d) In view of the fact that the transferee’s right of further distribution of the patented products should be maintained, it appears correct to attach no importance to the existence of a parallel patent in the country of marketing.”

Based on the above, the Tokyo District Court in the “Canon” case could determine the lawfulness of the parallel importation with relative ease. In the absence of a notice to the contrary, the patentee could not object to the importation as such. More difficult was the question if the refill of the cartridges could qualify as an act of reconstruction and thus infringe. In the absence of any legislative provisions, four previous cases had dealt with certain aspects of this issue.

3. Previous Case Law on Repair and Recycle

In the “Acycrobil” decision, the defendant had obtained marketing approval for a generic drug containing the same active formula as the one described in the plaintiff’s (Glaxo Wellcome) patent. Marketing approval would expire unless the products were actually brought on the market within six months from the date of marketing approval. The defendant thus purchased the plaintiff’s pharmaceuticals containing the active ingredient, distilled the latter and used this basic patented substance for producing the generic drug. As the patentee had received the economic benefits deriving from the patent by the act of first marketing, it could no longer control further acts of commercial exploitation by the purchaser. The action was thus dismissed. The court applied the remuneration doctrine and cited the Supreme Court’s decision in this respect.

The outcome of the second case was more doubtful in light of the two above-mentioned theories. In the “Tissue Paper” case, the plaintiff and patentee had supplied hospitals with tissue paper in patented dispensers. The patentee claimed that he had

---

14 Tokyo High Court, 31 January 2006, in: IIC 37 (forthcoming) – “Canon Ink Jet”.
16 Osaka High Court, 1 December 2000 (unreported), Case WA 11089/1998 – “Tissue Paper”.
retained title in the dispensers and under such retention obliged hospitals to have the dispensers refilled with tissue paper only through the patentee. The defendant was a company that had refilled the dispensers with tissue. According to the first instance decision, the plaintiff had validly retained title and refilling by third parties thus amounted to an infringement. The High Court found that the retention of title was invalid (as not clearly expressed) and refilling was permissible under the exhaustion doctrine, as the paper as such was not patented. While the result is correct, the reasoning is rather dubious. If the BBS decision is anything to go by, exhaustion should depend on the opportunity of commercial profit by way of the first marketing (not sale). Based on this, already Josef Kohler had argued that retention of title would allow the patentee to invoke rights based on contract or property, but not patents. In whichever way the patentee had marketed his products, be it by sale, donation, rental or lease, the opportunity of commercial profit had been given, and there was thus no reason to extend the patent right beyond first marketing.

The other two cases concerned the repair of patented products. The first case concerned a patented device for crushing stones. While the device as such was made to last for about two or three years, the life of the battering plate was just about one week. Substitution of such plate by a third party was nonetheless deemed infringing.

The case that attracted far more publicity concerned the refill of disposable cameras. The plaintiff Fuji held several utility models and designs related to “units of film and camera”. The claim of the patent at issue (Japanese Patent No. 1875901) reads: “Film unit with lens that has an unexposed film in camera body beforehand, and that give light exposure to the film, through exposure mechanism by shuttering, and that will not be re-used when such films are ejected after consumers have taken all the pictures…” The defendant in this case had recycled these cameras by inserting a new film and a new battery. In view of its patent, the plaintiff thought this an infringing act. The Tokyo District Court agreed.

The District Court tried to draw the line between repair and reconstruction by arguing that the defendant’s acts commenced at the very stage where the patented product’s useful life had come to an end, and that invoking the patent right

---

17 Osaka District Court, 3 February 2000 (unreported).
18 J. KOHLER, Handbuch des deutschen Patentrechts (Mannheim 1900) 473. One should note that US law allows the patentee to broaden his monopoly by a retention of title or notice of limited transfer (Mallinckrodt v. Medipart, 976 F. 2d 700 (Fed. Cir. 1992) and B. Braun Med. Inc. v. Abbott Labs. 124 F. 3d 1419 (Fed. Cir. 1997). The US first sale doctrine, however, is not based upon Kohler’s public policy reason for exhaustion, but rather on the Common law doctrine of implied licence. An “implied” licence, however, can be overridden by explicit contractual arrangements.
19 Osaka District Court, 24 April 1989, Mutaishû 21-1, 279.
20 Interim injunction of 6 June 2000, in: Hanrei Jihô 1712, 175, decision in the main action: Tokyo District Court, 31 August 2000, unreported – “Fuji Camera”.
here would not amount to a double remuneration of the patentee. It further argued that the defendant was replacing an important part of the principal item essential to the invention. After the defendant’s refill, one could no longer speak of the same product.

The reasoning of the court merits a closer look:

“Once a patented product has fulfilled its function, the patentee is allowed to re-enforce its patent rights over these used patented products. First, this will not affect the free market even if the patentee is allowed to claim patent infringement after the patented products are used-up, and second, in such case the patentee does not make a double profit. If patented products are commercially re-processed, used and sold, such act deprives the patentee’s marketing opportunities and diminishes the patentee’s profits... whether or not the used patented products have finished their function shall be determined by a comprehensive examination such as function, structure, material, application, manner of usage, circumstances of marketing of the patented products, etc... Once the defendant exchanges the main component which comprises a substantial part of patented invention, and thus manufactures new products, the patentee can enforce its patent rights over such products to the extent that these are products identical to the original patented products the patentee has sold. However, exchanging minor components of patented products (e.g., batteries or filters for electric equipment), or components which have a shorter life than the product itself (such as light bulbs for electronic equipment, or water-proof packing for underwater instruments), or repairing patented products by exchanging the damaged parts does not equal the manufacture of different products. The repaired products thus do not lose their identity as patented products... [In the case of equipping disposable cameras with a new film and battery]... it is difficult for consumers who use a pre-installed film for photographing to eject the used film without exposure to light... with regard to patented products, the connection part such as the hook is damaged when users remove the film, and hook and weld supersonic wave parts are damaged when people remove the back cover from the camera body, and therefore the recycled products that contain a new film and whose back cover has been reaffixed will be of lesser quality in terms of light blocking effect and general function when compared to the plaintiff’s patented products...the plaintiff’s patented product, the disposable camera’s body itself, is not supposed to be returned to consumers after these have brought the camera to a photo developing shop...Thus, when a consumer who has taken all the pictures using the built-in film, brings the camera to a photo shop, and the photo shop sends the disposable camera to a photo processing station where the built-in film will be ejected, the patented products have done their duty in the normal conditions of use. Therefore, in this case, the patentee’s patent rights over the patented products are not exhausted, be it nationally nor internationally.”

The decision already contains the two elements that the IP High Court in the “Canon” case identified as crucial in order to distinguish recycle from repair: the fulfilment of function and the exchange of a “substantial part of the invention”. The “Canon” case
clarifies that the “fulfilment of function” test must not be determined by the patentee, but refers to public perception.\textsuperscript{21}

4. Analysis

The authors would like to express four reservations regarding the distinction made between (permissible) repair and (impermissible) reconstruction in the cases “Fuji Camera” and “Canon”. These reservations are based upon two basic assumptions: First, that the breadth of a patent should be commensurate to the inventor’s achievements conferred to society by the disclosure of the invention, and second, that repair/reconstruction must be determined by looking at the inventive achievement as set out in the patent rather than the device that is actually sold.

(1) In “Fuji Camera”, the court attached importance to the fact that the cameras could only be opened with difficulties, and that in order to do so, it was necessary to damage a hook. To the extent that the recycled cameras are of lesser quality due to such interference, this may well be an issue of consumer misconception due to incomplete information, but certainly not one to determine patent infringement. Should the court take the (technical) difficulties of repair as an indication for reconstruction (and thus infringement), this is equally misguided: It would be like taking the existence of electronic protection measures as an indication for copyright infringement. Yet the limits of intellectual property rights must be determined by a social compromise between the inventor’s or author’s achievements and the interests of the general public rather than unilateral attempts to broaden rights by technical means. It would of course be different if the damaged hook was part of an inventive concept that as such required reconstruction in the course of re-inserting a new film. But the patent related to a winding mechanism. Thus, the technical difficulties of repairing a device may serve as an indication of the patentee’s intent of not having the device repaired, but cannot serve as a useful criterion for distinguishing repair from reconstruction.

(2) In determining “public perception” of when an article has fulfilled its commercial service life, the court refers to the “common understanding in society”, in the “Canon” case evidenced by a survey. To the extent that “common understanding in society” is meant as the opposite of “intention by the patentee”, the starting point is certainly correct.\textsuperscript{22} Where the limits of exhaustion are determined by absolute limits (as the

\textsuperscript{21} It should only be mentioned in passing that a very similar case of recycled cameras was decided in the US and found to be permissible repair: \textit{Jazz Photo v. ITC}, 264 F.3d 1094, (CAFC, 21 August 2001), \textit{Fuji Photo Film Co., Ltd. v. Jazz Photo Corp.}, 394 F.3d 1368, 1380 (Fed. Cir. 2005); \textit{Jazz Photo v. U.S.} (Fed. Cir. 2006).

\textsuperscript{22} See the interesting article by C. ANN, „Identität und Lebensdauer“ – Patentverletzung durch Instandsetzung patentierter Vorrichtungen, in: C. Ann et al. (eds.), Materielles Patentrecht – Festschrift für Reimar König zum 70. Geburtstag (Cologne 2003) 17.
Japanese courts assume for domestic, but not international exhaustion), these limits may not be altered by any intentions of the patentee on how and how often his products are used. This should also apply in cases where the mode of use is stated in the patent (e.g. “winding mechanism for single-use cameras”), unless this is a distinguishing feature over prior art and therefore part of the inventive concept. In the “Fuji Camera” case, there is nothing to indicate that the inventive concept of the winding mechanism would be functionally limited to single-use cameras. In other words, the wording in the patent that the cameras “will not be re-used” expresses an intention of the patentee rather than an inventive concept.

Yet for three reasons, the “common understanding of society” in determining the life span of a product is misguided. First, because the common understanding as understood by the court 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) winding mechanism was sold by the patentee in a single-use or a multiple-use camera? 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 his products. In the case of new products, particularly, 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-size firms (and repair/refill business are mostly in this range) from engaging in activities whose lawfulness they may only be able to determine by a survey. Such legal uncertainty strongly acts against the repair business.

(3) Even if public perception would allow the refill or the recycle of a product, such acts are deemed infringing, if in the course of doing so a “substantial part” of the invention is exchanged. Here again, the distinction between part of the invention and part of the product deserves mentioning. The patented invention may only refer to a winding mechanism, while the product is a camera. If the patent refers to the whole apparatus (toner cartridge, single-use camera), it must be determined what its substantial parts are. Patent law does not give any hint about which parts of the invention are substantial, and which not. Thus, ink is certainly a substantial element of a toner cartridge, just as film and battery are for a camera. Looking at it this way, no useful distinction can be made.

23 The feature that established the novelty of the invention was a ‘process of placing a film and of winding up a film in post photographing of a single use film unit with lens.’

24 One could even argue that in such case there could not be infringement, because by the replacement the “single use” element was no longer met, in other words, that the acts of the defendant could not be read on the claims because the camera had become a multiple use device. Which just shows that the single use element describes a desideratum, not a technical feature. And why then should disposable cameras be treated different from disposable ink cartridges where in both cases a single use is devoutly to be wished, at least as far as the patentee is concerned?
unless certain parts are completely superfluous to the functioning of the apparatus. It is thus necessary to refer to the inventive contribution which at least in European patents is expressed in the distinguishing part of the claim ("...characterised by") and which sets out the difference between the invention and prior art. Only this part may be deemed substantial in patent terms, because prior art is no achievement of the patentee’s and can thus not be part of his exclusive right, as the patentee has made no corresponding contribution or achievement in this respect. In both of the above cases ("Fuji Camera" and "Canon"), the inventive achievement is unrelated to the exchanged parts: Fuji did not improve prior art related to the film or the battery, and neither did Canon improve the ink used for the cartridges or devise an ink that is especially suitable for the cartridge developed. Rather, film, battery and ink are staple commodities. The fact that the courts in both decisions have held otherwise only confirms the authors’ perception that the criterion of “substantial part” is difficult to foresee and does add to the lack of legal certainty already denounced for the first criterion of “public perception”.

(4) The lack of legal certainty is confirmed by a sort of survey conducted by one of the authors amongst master students of the Munich Intellectual Property Law Course (MIPLC) in July 2006. An exam on Japanese patent law asked the students to apply the two step test as developed in “Canon” to the case of a refill of one-way cameras where the winding mechanism had been patented ("single use camera....characterised by a winding mechanism with three dented wheels in determined positions...."). Amongst the 25 students taking the exam, there was a wide variety of opinions both regarding the question of the lifespan of the cameras according to public perception, and if film and battery should be considered essential parts. The authors have the impression that the variety in opinion might not be much less amongst the Japanese judiciary.

(5) In sum, the authors (a) disagree with the notion that technical difficulties in the course of repair should determine the limits of a patent right; they take the view (b) that the starting point for determining reconstruction must be the patent as granted rather than the product implementing the invention, that (c) reconstruction must always be determined in light of the technical contribution or achievement as expressed in the patent, and that (d) the exchange of a part that bears no relation to such contribution or achievement cannot be deemed infringing. While these criteria may not solve all cases, they may prove a more foreseeable and appropriate guideline than the one used by the IP High Court.

25 This was the position of the US courts in Husky Injection Molding Systems v. R & D Tool & Engineering, 291 F. 3d 780 (Fed. Cir. 2002) (A part “which is not separately patented, is not impermissible reconstruction no matter how essential it may be”), and Aro Manufacturing Co. v. Convertible Top Replacement, 365 US 336 (S.Ct. 1961).

Im Bereich des Markenrechts hält die japanische Rechtssprechung – nach der Auffassung der Verfasser in zutreffender Weise – daran fest, daß eine Verletzung nur in Fällen der Herkunftstäuschung vorliegt. Das ist dann der Fall, wenn für den Verbraucher nicht eindeutig erkennbar ist, daß es sich um ein wiederbefülltes Produkt handelt. Gibt der Verbraucher die Wiederbefüllung hingegen selbst in Auftrag oder verkauft der Hersteller Ersatzteile mit dem Hinweis auf die Verwendung für bestimmte Produkte, so fehlt es an einer Verletzungshandlung.


verkauften Produkt ausdrücke. In beiden entschiedenen Fällen seien die ausgetauschten bzw. hinzugefügten Teile (Batterie/Film bzw. Tinte) in keiner Weise mit der erfinderischen Leistung verbunden gewesen, und im Falle der Einwegkameras sei nicht maßgebend, ob der Patentinhaber oder der Verkehr diese als wiederverwendbar ansähen, sondern ob sich das Erfindungskonzept technisch in gleicher Weise in Mehrwegkameras verwirklichen lasse oder nicht.