

Are Remanufacturers Safe from the Claws of Canon's New Litigation?





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Ever since Canon filed its new toner cartridge patent-infringement litigation in the United States, some in the industry have been asking whether this means only new-build cartridges infringe and remanufactured products are "safe." We are not attorneys, just industry observers, but, in our view, the short answer is "not necessarily."

While many of the accused cartridges in Canon's complaints are indeed new-build cartridges, that is not universally true. Some remanufactured cartridges are implicated as well. Moreover, many of Canon's prior lawsuits have named as defendants remanufacturers—even ones the industry generally deems to be "safe," "non-infringing" sources of product.

That does not mean that Canon will necessarily claim such remanufacturers are infringing the newer patents asserted in the recent U.S. complaints. If Canon had evidence of such infringement, the OEM presumably would have included it, as well as additional respondents/defendants, in its new complaints. However, it is important to think of Canon's new litigation not as an end point but as the latest big event in a multi-year effort that is bound to continue. We think it is certain that Canon will continue to file complaints around the world alleging infringement of its gear patents. This means resellers need to be very careful about what non-OEM products they choose to offer.

Previous Litigation

To understand Canon's new toner cartridge litigation, it is important to put it in the context of prior litigation. Since at least 2006, Canon has been asserting its patents on the coupling or gear used to connect a toner cartridge to the drive motor inside a printer. Some of the accused products in the 12 years of litigation have been new builds, but others have been remanufactured.

The industry first saw Canon asserting its gear patents in 2006 when the OEM sued GCC Group and distributor TallyGenicom for infringement of U.S. patent number [6,336,018](#) ('018). The accused products were new-build all-in-one toner cartridges, which at the time were a rarity. Canon was successful and got an injunction issued against the defendants. The win essentially crushed GCC, and Canon soon had one less competitor in the aftermarket. Today we wonder to what extent this win may have inspired Canon's seemingly relentless focus on patenting gear designs and a lot of its subsequent litigation.



We wouldn't say Canon's litigation had no impact on the aftermarket or that the Canon GEO was toothless, but the litigation and remedy probably did not have as big an impact as Canon had hoped. Hence, the current litigation aimed at the various "design-around" toner cartridges now sold in the United States.

In 2010, Canon launched its first parallel U.S. International Trade Commission (ITC) and federal district court legal actions over its gear patents (see ["Part 2: Canon Takes Aim at Ninestar, Should Others Worry?"](#)). In what became known as the 337-TA-730 Section 337 investigation before the ITC, Canon asserted that the Ninestar group of companies and various resellers infringed a pair of patents, U.S. patents [5,903,803](#) ('803) and [6,128,454](#) ('454), that the OEM held on a twisted prism gear design. Some of the accused cartridges were remanufactured but used a newly manufactured gear. Ultimately, Ninestar and the other respondents/defendants settled with Canon (see ["Canon Officially Announces End of Patent-Infringement Dispute with Ninestar"](#)).

In 2012, Canon filed another set of complaints before the ITC and in federal court accusing 34 companies of infringing of these same twisted prism gear patents (see ["Reman Nightmare Realized: Canon Sues Dozens Over Infringing Gear"](#)). In what became the ITC's 337-TA-829 investigation, Canon accused both new-build and remanufactured toner cartridges of infringing. For example, Clover Technologies, Green Project, Nukote, and Orink were respondents/defendants whose remanufactured toner cartridges were accused of infringing. After all the aftermarket firms named in these complaints either settled with the OEM or defaulted, the U.S. International Trade Commission (ITC) awarded Canon a general exclusion order (GEO) on its twisted prism gear designs in 2013 (see ["U.S. ITC to Restrict Imports of Infringing Canon Gears; Alerts U.S. Customs of GEO"](#)). This GEO, however, is no longer enforced because the patents at issue have expired (see ["Canon Says Sayonara to Twisted Prism Gear GEO"](#)).

More recently, in 2014, Canon filed patent-infringement complaints before the U.S. ITC and in district court alleging infringement of what became known as the dongle gear used in various Canon and HP all-in-one toner cartridges (see ["Here We Go Again: Canon Sues Firms for Infringing Various Gear and Drum Patents,"](#) ["Canon Requests New ITC Investigation over Coupling Used in Third-Party Toner Cartridges,"](#) and ["Canon's District Court Complaints against New Defendants Made Public"](#)). In Canon's ITC complaint that generated the 337-TA-918 investigation and in the federal court complaints, Canon named as respondents numerous companies, including some that strictly remanufacture cartridges, such as ILG and MSE, alongside firms that manufactured both new-builds and remanufactured cartridges, like Aster, Ninestar, and Print-Rite, along with various resellers. In 2015, the ITC awarded Canon a GEO in the 918 investigation, barring from importation into the United States cartridges that infringed Canon's dongle gear patents, specifically U.S. patents [8,280,278](#) ('278), [8,630,564](#) ('564), [8,682,215](#) ('215), [8,676,090](#) ('090), and [8,688,008](#) ('008) (see ["ITC Awards Canon GEO in Dongle Gear Investigation"](#)). Again, this was a win after all the respondents either settled with Canon or defaulted in the investigation.

After Canon was awarded the GEO in the 918 investigation (and even before), aftermarket supplies makers redesigned their cartridges to avoid infringing the dongle gear patents and get their products cleared by U.S. Customs to enter the United States. We wouldn't say Canon's litigation had no impact on the aftermarket or that the Canon GEO was toothless, but the litigation and remedy probably did not have as big an impact as Canon had hoped. The litigation



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caused numerous remanufacturers to have to redesign their products, aftermarket supplies companies had to pay big legal bills, Canon reaped untold amounts of money in private settlement agreements, and the GEO prevented some blatantly infringing products from entering the United States. But did the GEO and injunctions dry up the supply of non-OEM toner cartridges for Canon and HP laser printers in the United States thereby helping Canon and HP reclaim a huge amount of market share? The answer there is a “no.” Hence, the current litigation aimed at the various “design-around” toner cartridges now sold in the United States that were marketed as solutions that did not infringe Canon’s dongle gear patents.

The New Lawsuits

On February 28, Canon filed a slew of new patent-infringement complaints before the U.S. ITC and in U.S. federal courts against 49 aftermarket supplies companies, including manufacturers such as Aster, Kingway, Ninestar, and Print-Rite (see “[Canon Causes Another Cataclysm: OEM Sues Numerous Aftermarket Firms for Patent Infringement](#)”). Canon is asserting that these companies’ non-OEM toner cartridges and photosensitive drums have infringed a newer generation of patents on couplings or gear used in Canon and HP toner cartridges. Altogether, Canon is asserting nine patents, including U.S. patents [9,746,826](#) ('826), [9,836,021](#) ('021), [9,841,727](#) ('727), [9,841,728](#) ('728), [9,841,729](#) ('729), [9,857,764](#) ('764), [9,857,765](#) ('765), [9,869,960](#) ('960), and [9,874,846](#) ('846).

We have not seen the OEM assert these particular patents previously, but they are related to the firm’s family of dongle gear patents on which Canon was awarded a GEO in the 337-TA-918 investigation.

And Canon continues to file lawsuits alleging infringement of its dongle gear patents in other countries where it has patent protection. On March 12, Canon announced a new lawsuit in South Korea (see “[Canon Sues Online Seller of Aftermarket Toner Cartridges in Korea](#)”). Throughout 2017, Canon filed numerous dongle gear complaints in Germany (see “[Canon and JT Company Settle Patent Dispute in Germany](#)”). Canon’s new ITC complaint reveals that there are even more patent-infringement actions that it has not announced, until now. The OEM has filed even more lawsuits in Germany, revealed it has had one ongoing in Germany since 2016 against remanufacturer Turbon, and filed a pair of dongle gear patent-infringement cases in China (see “[Canon’s ITC Complaint Reveals a Lot about Other Worldwide Litigation](#)”).

Lots of New-Builds but Also Remans

From our review of the new Canon complaints, it appears to us that a lot of the accused cartridges are new-builds. That Canon would take aim against new-build cartridges is a no-brainer.

Increasingly many markets worldwide, including the United States, have seen an influx of new-build cartridges because these have certain advantages over remanufactured cartridges that make them attractive to resellers. Of course, the big one is price. New-build cartridges cost far less than remanufactured cartridges because new-build manufacturers don’t have the high fixed costs associated with sourcing empty cartridges. With end users clamoring for cost savings, new-builds can be very appealing to resellers. Another advantage is speed to market—makers of new-build cartridges can bring alternative to newer OEM designs to market faster than can remanufacturers.

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Remanufacturers need to obtain a large enough supply of spent cartridges before they can offer alternatives to a new design. Sometimes remanufacturers can figure out how an older cartridge model can be tweaked to be compatible with the newer cartridge model, but other times this is not possible.

Some of the big Chinese aftermarket cartridge manufacturers make both remanufactured cartridges and new-build cartridges, which indicates demand remains for both. However, ask these manufacturers which of the two categories they are selling more of, and it is pretty clear that demand for new-builds is stronger.

So, does it make sense that so many of the accused cartridge in Canon's new complaints appear to be new builds? Absolutely.

Also, recent changes in U.S. patent law have made it more challenging, at least in one important respect, to sue remanufacturers. In 2017, the U.S.

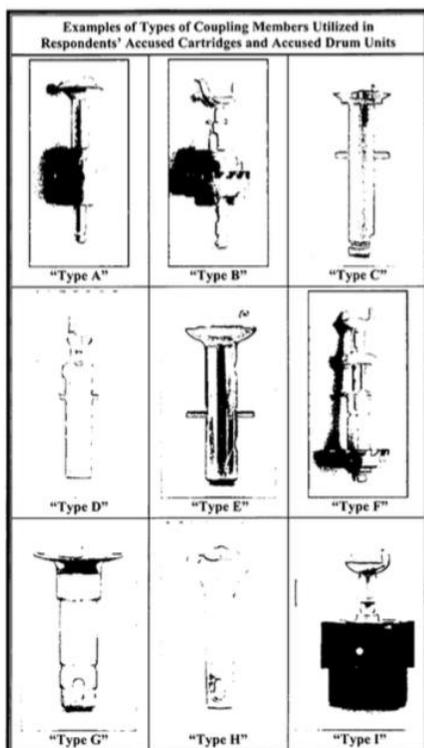
Supreme Court issued its decision in *Impression Products v. Lexmark International* (see ["U.S. Supreme Court Sides with Impression Products and against Lexmark on Patent-Exhaustion Questions"](#)). This decision allows for remanufacturers to use empty cartridges that were first sold outside the United States in products for sale in the United States. Prior to the decision, OEMs could and did sue makers and sellers of remanufactured toner cartridges for infringement for using empties first sold outside the United States. But we think the *Impression Products* decision plays only a limited role in why Canon is not suing more remanufacturers in its current U.S. suits. While in the 2014

litigation Canon raised the source of empties as an issue, it was never the primary grounds of its infringement claims against remanufacturers.

The *Impression Products* decision did, however, help reduce the effectiveness of the GEO Canon was granted in the 918 investigation, at least as it pertains to remanufactured cartridges. While *Jazz Photo* was still the law of the land, when it was enforcing GEOs, U.S. Customs would not allow into the United States remanufactured cartridges that used cores sourced from outside the United States. After that decision, that restriction was lifted, which is one of the major reasons why we have seen so many fewer seizure-and-forfeiture orders related to all GEOs, not just Canon's, since the *Impression Products* decision.

But to return to the issue of remanufactured cartridges, while we are seeing Canon perhaps target more new-builds and fewer remanufactured cartridges in the litigation just filed at the end of February, Canon is indeed accusing some remanufactured cartridges of infringing its newer gear patents. Canon states right in the ITC complaint, "Accused Cartridges ... include both newly-manufactured cartridges (sometimes referred to as 'clones' or 'compatibles') and remanufactured cartridges."

Canon is claiming there are nine basic types of infringing cartridges (Types A through I) with representative gears from these toner cartridges shown at left. At least some of the Type C cartridges alleged to infringe are remanufactured. For example, Canon claims that certain Eco Plus-branded remanufactured cartridges infringe. Canon alleges that these cartridges are manufactured by Print-Rite and sold by some of the reseller respondents, including ACM and MWave.



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Canon's Claims against Remanufacturers

Going back to Canon's 2010 litigation against Ninestar and its distributors and its 2012 twisted prism gear litigation, Canon essentially argued that remanufactured cartridges infringed when they used new, third-party gear. After this litigation, certain remanufacturers wised up and began harvesting and reusing original OEM gears in order to avoid infringement claims.

As Canon's dongle gear litigation unfolded, especially in Europe, we saw Canon claiming that even remanufactured cartridges using OEM gear infringed (see "[Canon Case Taking Anti-Reman Twist in Europe, Is U.S. Next?](#)"). That is because Canon's patents claimed elements on the drum side of the coupling. If a new drum was used or if new parts were used on the drum, Canon claimed infringement. Some European remanufacturers even claimed that in their discussions with Canon, the OEM argued that "the mere act of assembling an OEM toner cartridge infringes its patents."

We never got to see how such arguments would progress in the United States because, of course, all the respondents/defendants ultimately either settled or defaulted. At one point, some of the remanufacturer respondents in the ITC proceeding, including ILG and Ninestar, asked the Commission for a summary determination that "replacing worn out or depleted parts while reusing most original parts of a Canon or HP toner cartridges is protected as permissible repair of a patented article." Canon opposed, arguing that some of the remanufactured cartridges may have used cores first sold outside the United States and thus Canon retained patent rights in these cartridges. Canon also

argued that another issue was whether Canon's patented drums were spent at the time respondents replaced them with new drums. The Administrative Law Judge determined that he would not issue a summary determination on the permissible repair issue because of "genuine issues of material fact" related to whether or not that there was a patent-exhausting first sale of the empty cartridges used in the remanufactured toner cartridge. Of course, all this was before the Supreme Court's *Impression Products* decision.

The industry did get to see how at least two remanufacturers' permissible repair arguments fared in Germany. KMP PrintTechnik AG and wta Carsten Weser GmbH were two of the remanufacturers Canon filed patent-infringement lawsuits against in Germany, claiming infringement of one of its dongle gear patents (European patent [2 087 407](#)). Both remanufacturers had reused Canon's original dongle gears and combined them with new drums. While lower courts found in Canon's favor, in October 2017, the Federal Court of Justice in Karlsruhe, the final arbiter in the case, dismissed Canon's lawsuits against both companies and determined the remanufactured cartridges had been permissibly repaired (see "[German Court Dismisses Canon Dongle Gear Suits in Stunning Reversal of Lower Court Rulings](#)").

It is very possible that the remanufactured cartridges Canon is claiming infringe its patents in the new litigation use new-built gear. But if any of the cartridges reuse OEM gear, or if Canon files any additional lawsuits against remanufacturers that use OEM gear, we may see Canon raising issues about the drum side of the engagement and that reassembling cartridges infringes once again. Time will tell. If so,



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we may see remanufacturers once again raising permissible repair as a defense.

Canon Is on the Attack

At the end of the day, it all boils down to this: Canon is looking for infringement wherever it can find it. It is incumbent on all aftermarket cartridge players to think long and hard about the products they

offer, get indemnification agreements from their suppliers, and consult with patent attorneys and R&D teams about the best ways to avoid infringement. Canon is seeing lots of new-builds in the marketplace, and it is targeting those in its lawsuits. But Canon is continuing to target remanufacturers as well, both in the United States and overseas.

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