A critical Analysis of the conflict between the Right to repair and Intellectual Property Rights

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Abstract: The Right to Repair movement advocates for consumer empowerment by granting people the ability to repair and maintain their own devices. Many products in the modern world, like smartphones and appliances, contain embedded software, which makes repair complicated. Although consumers possess the hardware, manufacturers assert ownership of the software, citing intellectual property rights as justification. This results in substantial obstacles to repair that hinder people from easily fixing their devices.

This paper looks into the tension between the Right to Repair and intellectual property rights like patents, copyrights, and trademarks. Manufacturers maintain that protecting their intellectual property is essential for driving innovation and ensuring safety for consumers. On the other hand, supporters of the Right to Repair argue that there should be exceptions for the greater good. They believe allowing repairs can extend the life of products and cut down on waste, which ultimately helps the environment. The article also examines various legislative efforts in the U.S., India, Australia, and the European Union that support the Right to Repair. For example, Massachusetts became the first state to enact a law that requires manufacturers to share repair information with independent shops. In India, there is a push for laws that find a balance between intellectual property rights and consumer rights, aiming to disclose repair information without harming creators' interests.

This analysis highlights the necessity for a balanced approach that takes into account both innovation and consumer rights. By requiring the disclosure of repair information while protecting creators, policymakers can encourage innovation and accessibility. Such a system should maintain intellectual property protections without compromising their purpose.

Keywords: Right to repair, intellectual property rights, manufacturers, consumer, intellectual property exclusivity, information, access.

I. INTRODUCTION

In today's world, almost every equipment we own has a chip in it. There is software embedded in everything from cars, televisions, refrigerators, and tractors to mobile phones. The presence of these software makes it difficult for the consumers to repair it when needed. The problem does not lie with the software itself, but because of the restrictions that manufacturers impose. Manufacturers claim that the hardware is owned by the consumer, but the software is really owned by them. They also implement digital rights management to restrict consumers from carrying out basic repairs. A survey by "SquareTrades estimated that Americans spent \$3.4 billion on smartphone repairs in 2018". Manufacturers want to control the repair market; they do not want consumers to repair the devices, but they want them to buy new ones.

As a result of these restrictions on repair, the right to repair movement emerged. Manufacturers oppose the right to repair on the grounds of cybersecurity, consumer safety and to protect the intellectual property they own.

If a person buys a smartphone after spending a huge amount of money on it, the battery of the phone starts facing issues after using it for a few days and you have to keep it charged to the source, which is impractical. So, you end up buying a new phone because you find out that installing a new battery is impossible as there is a lack of access to digital tools. In the above instance, there is a withholding of information of repair by the manufacturers. They argue that disclosing confidential repair information would affect patent exclusivity, copyright misappropriation, trademark and trade secrets

over People', (2020) 22 TUL. J.TECH. & INTELLECTUAL PROPERTY 165.

¹ S. Kyle Montello, 'The Right to Repair and the Corporate Stranglehold over the Consumer: Profits

infringement. This leads to a new array of issues relating to the use of Intellectual property rights².

The right to repair exists at an intersection between consumer rights to access information and Intellectual property rights. Many states in the U.S have passed laws with respect to the Right to repair; for example, Massachusetts was the first state to pass a law on the Right to Repair in 2013³, focused on automobiles, New York also passed Digital Fair Repair Act⁴, which mandates equipment manufacturers to provide information to independent repair services. Although in India, there is no legislation for the right to repair. The Ministry of Consumer Affairs has set up a committee to come up with a Right to Repair framework⁵. Over the years, there have been multiple instances where manufacturers have sued independent repair service providers and third-party services for infringement of various IP rights.

In today's world almost every equipment or device owned by us has some software, proprietary technology or lock-out using DRM (Digital Management Rights) which affects the maximum utility of the device by consumers⁶. For instance, the tractors used by framers have become more complex with the passing of time. Manufacturers rely on the possibility of theft, misuse which is backed strongly by intellectual property protection granted by federal legislations. Through this, they also control the use of their equipment, even after sales.⁷

There are two sides to the right to repair movement. On one hand, the arguments put forth by the proponents of the right-to-repair movement and, on the other, the claims of intellectual property infringement by manufacturers.

² - Feltrinelli & Brogi, 'Adjustment of the "customs value" of imported goods for failure to include royalties paid by the importer'https://www.feltrinelli-

brogi.com/en/adjustment-of-the-customs-value-of-imported-goods-for-failure-to-include-royalties-paid-by-the-importer/>

The opponents of the right-to-repair movement claim that repairs by third-party services other than the authorized repair services will lead to issues like cybersecurity threats, and consumer safety concerns. They also maintain that there are intellectual property issues with right to repair. The manufacturers claim that it will infringe their copyright, trademark, and trade secrets or designs. In the case of Apple v. Henrik Huseby The manufacturers argued that unauthorized access to their parts in the market, which is called the grey market, violates their trademarks and claimed that such products are counterfeits since they have authentic trademarks or copyright in them.

In a letter written to the Honourable David Harris, III. General Assembly from John I. Taylor, senior Vice President of Government relations, LG Elections. USA, the LG wrote that "it would be extremely difficult for manufacturers to honor product warranties in circumstances in which independent third-party services are granted full access to manufacturer's software, parts and products because they could damage a product with an improper part or repair." ¹¹⁰

Large technology companies like Apple and Microsoft maintain that allowing a right to repair would lead to a rip-off on their intellectual property rights and would lead to consumer security threats. 11

Manufacturers use intellectual property justifications to control the repair service market, which in turn affects consumer choice.

On the other hand, the proponents of the right-torepair movement, that is, the consumer, has an expectation that the purchase of the product creates an implied right to authorized access to repair information and technical know-how. They claim that

³ Dr. Aarti Mohan Kalnawat, Dr. Nuzhat Rizvi, 'The Right to Repair Movement: Impact & Implications' (2022), Vol X (1), Russian Law Journal issue 43.

⁴ Id.

⁵ Rajesh Kumar, Ausaf Ahmad Malik, Jageshwar Nath Singh, Pradeep Kumar, Mukesh Kumar Ray, Vibha Srivastava, Kavita, 'Right to Repair is a Child

of the 21st Century: A Critical Study' (2023), Vol 11(3) Russian Law Journal 1047.

⁶ Alexander Joseph Gambino, 'Right to Repair: Whose Right is it Anyway?' (2023) 25Transactions: Tennessee Journal of Business Law 125.

⁷ id

⁸ See Montello, supra note 1.

⁹ 17-151334TV1-OTIR/04

¹⁰ Leah Chan Grinvald and Ofer Tur-Sinai, 'Intellectual Property Law and the Right to Repair' (2019) 88 Fordham Law Rev. 63

¹¹ S. Kyle Montello, 'The Right to Repair and the Corporate Stranglehold over the Consumer: Profits over People', (2020) 22 TUL. J.TECH. & INTELLECTUAL PROPERTY 165.

the argument by manufacturers that it affects their intellectual property rights is not persuasive, as the right to repair fits within the public interest aspect of intellectual property laws. ¹²

The proponents also argue that throwing away the products each time creates e-waste and raises a sustainability issue. Additionally, there will be an increase in the goodwill and reputation of the manufacturers if they allow access to repair information and manuals.

Therefore, the proponents of the right-to-repair movement advocate these primary objectives¹³,

- 1. To make information available in the form of manuals, schematics and software updates
- 2. Availability of parts and tools used for repair to be used by individuals and third-parties.
- 3. Allow modification of a device, which allows the owner to install custom software.
- 4. Manufacturers should design products and devices that are easy to repair.

In the light of the above background, this article delves into the conflict between the right to repair and Intellectual property rights of the manufacturers. It further expands on the opposing and supporting arguments of the movement. This article aims to discuss in detail the impact of the right to repair on each intellectual property like copyright, patent, trademark and designs. It makes an effort to answer "how" and "why" manufacturers and right-to-repair advocates put forth their arguments.

II. RIGHT TO REPAIR MOVEMENT

INDIA

The Right to repair is a growing movement advocating for consumer rights to repair and modify their own purchased products. In India, the concept of right to repair has recently garnered some attention. The government has been working in the

light of consumer rights, sustainability and economic efficiency.

Although in India there is no explicit "right to repair" legislation, there are precedents that have identified an implied right to repair. ¹⁴ In the case of Shri Shamsher Kataria v. Honda Siel Cars Limited & Ors¹⁵, the CCI held that automobile firms cannot use intellectual property rights as a disguise to engage in unfair market practices.

This movement's goal is to make manuals, spare parts, tools, and repair information available to consumers. The movement has been gaining momentum all over the world for quite some time now. The government of India also has presented a strategy to come up with a regulatory framework to grant the right to repair.

Therefore, India's adoption of a comprehensive and thoughtfully drafted right-to-repair legislation holds significance in the future. Implementing a well-drafted legislation gives an opportunity to harmonize the conflicting interest between innovation and consumer rights. It has the potential to create a balance between the protection granted to creators and innovators through intellectual property laws and the rights of the consumer to repair and maintain the products.

One of the primary concerns surrounding Right to Repair is the potential conflict with patent, copyright and trademark protections. These protections grant manufacturers exclusivity over the control of the products. A carefully drafted legislation can address the concerns of the conflict by ensuring that IP rights granted are not diluted but at the same time allow consumers to exercise their rights¹⁶. Such a balance is essential to maintain the incentives for innovation. Intellectual property laws are designed to foster the same.¹⁷

Law-makers should also keep in mind that providing clear and well-defined exceptions under IP laws for

the-right-to-repair-deciphering-the-legal-conundrum> accessed 3 December 2024.

¹² S. Kyle Montello, 'The Right to Repair and the Corporate Stranglehold over the Consumer: Profits over People', (2020) 22 TUL. J.TECH. & INTELLECTUAL PROPERTY 165.

¹³ Thorin Klosowski, 'What You Should Know About Right to Repair', N.Y. Times: Wirecutter July (2021) https://www.nytimes.com/wirecutter/blog/what-is-right-to-repair/ accessed 6 December 2024.

¹⁴ Priya Raghuvanshi, 'IP vs. the right to repair: deciphering the legal conundrum', (The Leaflet) (11 October 2021)</br>
https://theleaflet.in/analysis/ip-vs-

Shri Shamsher Kataria v. Honda Siel Cars India Ltd. & Ors, Case No. 03 of 2011 (CCI 25/10/2014)
 IIM Bangalore, Right to Repair: India's Step in the right direction, Oct 20,2023.

¹⁷ Daniel J. Gifford, Law and Technology: Interactions and Relationships, 8 MINN. J.L. SCI. & TECH. 571 (2007).

repair-related activities to ensure that intellectual property rights do not stifle competition or innovation. Therefore, a legislation for Right to repair is not about undermining intellectual property rights but about reimagining them in such a way that balances it with the rights of the consumers.

U.S.A.

In the U.S., the right-to-repair movement has progressed when compared to India. This has led many states to enact a Right to Repair legislation. The movement has gained significant traction in the rising causes to support and advocate for over the past few decades. The early legislative foundations for the movement can be traced back to the Magnuson-Moss Warranty Act in 1975. ¹⁸In the 1990s, the attention turned to automotive repair. By the early 2000s, Congress introduced the first bill related to the Right to Repair, mainly concentrating on automotive issues. ¹⁹ By 2011, groups like iFixit began seeking exemptions under the Digital Millennium Copyright Act.

A major milestone happened in 2012 when Massachusetts approved a Right to Repair Act. This law required automotive manufacturers to share tools and repair information with independent repair shops.²⁰

In 2021, President Biden signed an executive order to promote competition within various markets.²¹ This encouraged the Federal Trade Commission to create a regulation that supported the movement. In 2022,

New York passed the Digital Fair Repair Act and became the first state to pass a comprehensive law requiring manufacturers to disclose repair information, tools and parts. In 2023, California passed its own Right to Repair Act.²²

EUROPEAN UNION

The movement was seen in the early 2000s in the EU. In 2009, a significant milestone occurred with the adoption of Eco-design Directive. In 2010s, public awareness raised significantly. Various organizations campaigned for policies that would empower consumers to repair rather than replace²³. In 2020, the European Commission adopted a Circular Economy Action²⁴, which aimed at enhancing product repairability²⁵. In 2023, the European Commission presented a proposal for a comprehensive Right to Repair directive.²⁶

In 2024, the council gave its final approval to the directive, marking a pivotal milestone in legislation supporting consumer rights in the EU.²⁷

AUSTRALIA

The origins of Right to repair in Australia can be traced back to concern by the public over waste and sustainability. By the early 2020s, various organizations and groups emerged, which started pushing for reforms that would give access to repair and its information. ²⁸

In 2021, Australia made significant growth by passing laws focusing on automotive sector.²⁹ These

gives-final-approval-to-right-to-repair-directive/> accessed on 3 December 2024.

¹⁸ Kevin Purdy, 'Right to Repair – A Timeline of Fighting for the Fix', (iFixit) (March 2020) https://rla.org/media/article/view?id=1103 accessed on 3 December 2024.

¹⁹Id.

²⁰ Kevin Purdy, 'Right to Repair – A Timeline of Fighting for the Fix', (iFixit) (March 2020) https://rla.org/media/article/view?id=1103 accessed on 3 December 2024.

²¹ Irene Calboli, 'The Right to Repair: Recent Developments in the USA', (WIPO MAGAZINE) (August 2023)< https://www.wipo.int/web/wipo-magazine/articles/the-right-to-repair-recent-developments-in-the-usa-56378> accessed on 3 December 2024.

 ²³ Council of the EU, 'Circular economy: Council gives final approval to right-to-repair directive' (30 May 2024) <
 https://www.consilium.europa.eu/en/press/press-releases/2024/05/30/circular-economy-council-

²⁴ PlanInbound Logistics, https://magazine.inboundlogistics.com/view/754554 366/31/, June 2024.

²⁵ Id.

 ²⁶ Candido Garcia Molyneux & Anna Oberschelp de Meneses, 'The EU Adopts Right to Repair Directive', (June 10 2024)
 https://www.insideenergyandenvironment.com/2024/06/the-eu-adopts-right-to-repair-directive/>accessed on 3 December 2024.

²⁷ See, supra note 20.

²⁸ Leanne Wiseman, 'Australia's leading research and environment organisations call for major reform at 2023 Right to Repair Summit', (9 August 2023)https://news.griffith.edu.au/2023/08/09/australias-leading-research-and-environment-organisations-call-for-major-reform-at-2023-right-to-repair-summit/ accessed on 3 December 2024.

²⁹ Australian Government, Productivity Commission, Final report to Government and release (1 December

mandated a data-sharing scheme where manufacturers have to share critical repair information with independent repair shops. Following this, the Productivity Commission undertook an inquiry and released its report. This report analysed the barriers that consumers faced. ³⁰

In 2023, Australia hosted an event known as the Right to Repair Summit, where they discussed that Australia had the potential to lead the International Right to Repair initiatives provided, they make decisive policy decisions.³¹

Therefore, there is a growing momentum all over the world, but there are still complexities surrounding intellectual property rights and right to repair. It stresses upon the necessity for consumers to have the ability to repair their own products without undue restrictions form the manufacturers. While manufacturers cite intellectual property concerns, arguing that unauthorised repairs could lead to Intellectual property violations. It is imperative that policy makers realise the need to recognise the value of consumer rights along with intellectual property protections to create a balance between access and incentive.

III. THE CONFLICT BETWEEN REAPIR AND INTELLECTUAL PROPERTY RIGHTS.

a) PATENTS

Modern consumer rights are being shaped by rapid technological advancements and an increasing reliance on products protected by intellectual property rights, particularly patents. Patents encourage innovation by granting their owners exclusive rights to profit from their inventions. However, the right-to-repair movement has initiated a significant debate over these exclusive rights. The conflict centres on the monopoly aspect of patent law, which gives inventors temporary control over their inventions. This exclusivity is intended to reward inventors for their investments in research and development. Yet, this exclusivity extends beyond the initial sale, impacting the availability and affordability of replacement parts and repair tools. The economic implications are considerable. In many industries, the aftermarket for replacement parts

copyright. Legal protections, lik

https://www.pc.gov.au/inquiries/completed/repair#re port> accessed on 3 December 2024.

becomes a crucial revenue source, especially for manufacturers of smartphones and printers. This control over repairs has led to claims of monopolistic practices, forcing consumers to either rely on authorized service providers or purchase new products. The distinction between repair and reconstruction complicates matters. Repair is seen as legitimate, helping consumers restore a product's functionality, while reconstruction involves creating a new product, which can infringe on a patent³². For example, replacing spare parts typically qualifies as repair, but challenges arise due to the blurry line between the two terms. Courts often struggle to apply a clear standard to this repair-reconstruction analysis. Traditionally, the "spentness" of a product has guided this analysis, measuring whether the patented item has reached its utility limit. Unfortunately, this approach sometimes labels any attempt to restore functionality as reconstruction, failing to reflect consumer and patentee expectations and focusing instead on technical aspects like component durability.³³ Product owners also impose restrictions on repairs through post-sale contracts. For instance, the terms for a Samsung Galaxy smartphone specify that any unauthorized changes or modifications could void the warranty.

The right to repair movement argues that such restrictions will stifle competition. Advocates of the movement want to ensure access to repair manuals, tools and parts, which empowers consumers to repair their products without infringing patents. The conflict between the right to repair and intellectual property rights also highlights the need for a balanced framework. Policymakers should consider the interests of all stakeholders, from patentees to consumers who demand affordable and accessible repair options. While patents are essential because they act as an incentive for innovation, they should not come at the cost of consumer autonomy. A legal framework must be created which respects both innovation and accessibility.

b) COPYRIGHT

Manufacturers often embed complex software in their devices, and this software is protected by copyright. Legal protections, like anti-circumvention

³¹ See Supra Note 24

³² Mark D. Janis, 'A Tale of the Apocryphal Axe: Repair, Reconstruction, and the Implied License in Intellectual Property Law' (1999) 58 Maryland Law Review 423.

³³ Id.

laws, make repairs more difficult. Copyright law protects creative works, giving owners control over reproduction, distribution, and the creation of derivative works. The main issue arises when embedded software in devices conflicts with the right to repair. Anti-circumvention measures, such as those in the U.S. Digital Millennium Copyright Act of 1998, are also present in Indian Copyright law.³⁴ These laws penalize the circumvention of Technological Protection Measures (TPM). While some exceptions exist, they are limited. The impact of copyright on repair is significant. Manufacturers often keep manuals and diagnostic tools private under copyright claims, which restricts access for thirdparty repairs and consumers. A notable example is John Deere's farming equipment, which includes embedded software. Copyright is increasingly used to protect functional aspects of devices, blurring the lines between patents and copyright. For instance, replacing parts may require software updates or code changes, which can be seen as unauthorized. In the case of FTC v. Actavis³⁵, the court ruled against overly restrictive patent licensing agreements, regardless of whether they led to excessive profits³⁶. Intellectual property defense is misused not just against software repair but also against sharing service manuals. For example, a cease-and-desist letter was issued to someone who distributed copyrighted repair manuals³⁷. To balance copyright and repair rights, changes to existing copyright laws are necessary. Broader exceptions under fair use and anti-circumvention measures would allow consumers and third-party services to legally access the embedded software and repair information they need. Some U.S. states already have laws requiring manufacturers to share repair information and parts at fair terms, especially in the automotive sector. It's essential to distinguish between the creative and functional aspects of software to limit copyright scope concerning repairs. Policymakers should ensure that copyright does not hinder necessary repair activities for device functionality.

c. TRADEMARKS

³⁴ Section 65A.

Trademarks help consumers identify the quality and authenticity of products. They protect consumers from misleading information and also guard manufacturers against unfair copies of their products. Manufacturers may use trademarks to block the importation of spare parts. One way to do this is by placing trademarks on internal components of a product, like batteries and cables.³⁸ Unlike patents and copyrights, trademarks don't offer financial incentives for innovation. Instead, they help prevent consumer confusion and support fair competition in the market. However, manufacturers often use trademarks and trade dress to limit repairs. Trade dress safeguards the design and packaging of products. Independent repair services sometimes struggle to buy spare parts at a reasonable price from manufacturers, which pushes them to the grey market instead. To counter this, some manufacturers, like Apple, add their logos to internal parts, maintaining control as long as the trademark is active. However, goods from the grey market enter countries through unauthorized channels. While selling these goods may be legal, some countries have strict laws against it³⁹. For example, U.S. law significantly restricts the importation of these goods⁴⁰. In India, section 11(2)(c) of trademark law offers some flexibility. It states that using a trademark to refer to a trader's goods or services isn't considered infringement. 41 This provision is important for independent repair providers since they rely on branding to promote their services.

IV. RIGHT TO REPAIR DEBATE

A. Arguments Supporting the Right to Repair

Supporters of the Right to Repair contend that using intellectual property rights (IPR) to limit repairs fosters an anti-competitive environment and restricts market freedom. They argue that such restrictions promote a throw-away culture, which harms environmental sustainability. Additionally, they believe that IPR laws should have exceptions that align with public policy and the broader interests of society. Advocates maintain that the right to repair is

³⁵ 570 U.S. 136 (2013).

Michael A. Carrier, 'The Right to Repair, Competition, and Intellectual Property', (2023) American Bar Association, Vol 15 (2).

³⁷ Id.

³⁸ See, Carrier Supra Note 36.

³⁹ Alexander Joseph Gambino, 'Right to Repair: Whose Right is it Anyway?' (2023) 25Transactions: Tennessee Journal of Business Law 125.

⁴⁰ Id.

⁴¹ Dr. Poorna Mysoor, 'Private Law, IP and the Right to Repair', (2023)https://dx.doi.org/10.2139/ssrn.4805033 > accessed on 3 December 2024.

essential for maintaining a product's functionality, making it transformative, and therefore deserving of fair use protection⁴². This means that modifying software to use a device in new ways is legitimate. Proponents also emphasize that the right to repair boosts research and helps people understand how a copyrighted work functions.⁴³ By enabling repairs, products can last longer, contributing to their overall durability and extending their lifespans. This movement supports independent repair shops and third-party services, which play a vital role in domestic economies, especially in countries like India⁴⁴.

Thus, supporters highlight environmental sustainability and product durability as key reasons for their stance. They also argue that the right to repair aligns with the historical context of IPR, which has involved the sharing of knowledge and information.

B. Arguments Opposing the Right to Repair

Opponents of the Right to Repair express concerns that allowing independent services to perform repairs could lead to several complications. They raise issues related to cybersecurity, consumer safety, and potential problems with product warranties. A primary argument from this side is that third-party repairs could violate intellectual property laws, including copyrights related to embedded software, service manuals, trademarked parts, and batteries. The issue of patents complicates matters further, as there is still ambiguity about what constitutes repair versus reconstruction. Manufacturers argue that unauthorized repairs might give third parties access to copyrighted software and other expressive works. There are also concerns about using parts from the

grey market, which could be seen as infringing on trademark rights. 46 Counterfeit goods bearing well-known logos could harm reputable companies by entering markets through unauthorized channels. 47 Regarding the disclosure of repair information, manufacturers contend that sharing this knowledge could expose their trade secrets 48. They argue that protecting this information is crucial for maintaining their competitive edge.

There is also no concrete proof or evidence that shows that manufacturers protecting their IP, will completely restrict repair.⁴⁹

V. SUGGESTIONS

A. Balanced Legislation: It's crucial to create laws that align intellectual property rights with the public good. These laws should enable consumers and independent repair services to access repair information while still protecting the interests of creators and innovators. ⁵⁰ Lawmakers need to include clear exceptions in intellectual property laws, specifically for repair activities. This would allow users to maintain and fix their products without fearing legal repercussions.

B. Mandatory Disclosure: To empower consumers and independent repair businesses, manufacturers should be required to disclose important repair resources. This includes not just repair manuals and technical diagrams but also diagnostic tools that help users understand and fix their devices. This information should be available fairly and transparently, without high costs or unnecessary obstacles.⁵¹

⁴² S. Kyle Montello, 'The Right to Repair and the Corporate Stranglehold over the Consumer: Profits over People', (2020) 22 TUL. J.TECH. & INTELLECTUAL PROPERTY 165.

⁴³ Id.

⁴⁴ Christina Purcell, 'The Impact of "Right to Repair" Legislation on Innovation and Intellectual Property in the Automotive Industry', Independent Study Project Report, Ross School of Business at the University of Michigan, 2013.

⁴⁵ S. Kyle Montello, 'The Right to Repair and the Corporate Stranglehold over the Consumer: Profits over People', (2020) 22 TUL. J.TECH. & INTELLECTUAL PROPERTY 165.

⁴⁶ Id.

⁴⁷ Christina Purcell, 'The Impact of "Right to Repair" Legislation on Innovation and Intellectual Property in

the Automotive Industry', Independent Study Project Report, Ross School of Business at the University of Michigan, 2013.

⁴⁸ Id.

⁴⁹ Ike Brannon, 'A Criticism of 'Right to Repair' Laws, Product Safety & Consumer Protection, Regulation' (2024).

⁵⁰ Rajesh Kumar, Ausaf Ahmad Malik, Jageshwar Nath Singh, Pradeep Kumar, Mukesh Kumar Ray, Vibha Srivastava, Kavita, 'Right to Repair is a Child of the 21st Century: A Critical Study' (2023), Vol 11(3) Russian Law Journal 1047.

⁵¹ Arora, Himanshu 'Right to Repair vis-à-vis Indian trade mark law: A comparative analysis' (2021) The Journal of World Intellectual Property, 24(1-2), 41-54 < https://doi.org/10.1111/jwip.12183 >.

C. Judicial Clarification: It's vital to clarify what constitutes repair versus reconstruction. Clear legal interpretations can help establish guidelines that distinguish legitimate repair efforts from possible patent infringements. This will provide both consumers and manufacturers with a better understanding of their rights, reducing confusion and potential legal issues.

D. Public Awareness Campaigns: Raising consumer awareness about repair rights and the environmental benefits is essential. Campaigns should focus on teaching the public about the advantages of repairability, shifting perceptions to see repair as both a practical and sustainable option. Supporting local initiatives that promote repair can help foster a culture of sustainability.⁵²

E. Collaboration Between Stakeholders: Working together among various stakeholders is key to addressing the complex relationship between intellectual property protections and consumer needs. Policymakers, manufacturers, and consumer groups should come together to develop comprehensive solutions.

These strategies can help create a regulatory framework that encourages innovation while protecting consumer rights and promoting environmental sustainability. The Right to Repair movement offers a unique chance to reshape the relationship between creators and consumers, focusing on reparability to benefit society as a whole⁵³.

VI. CONCLUSION

The Right to Repair movement is fundamentally concerned with reclaiming consumer autonomy. The right to repair is thus a concept that is founded on the basis of utilitarianism, which believes in the welfare of the larger number of people. ⁵⁴ This philosophical framework emphasizes the welfare of the greatest number. Intellectual property rights are necessary to reward creativity and incentivize the efforts of the creator. Intellectual property laws cannot be

interpreted to be absolute. The lack of information, service manuals, spare parts in the guise of intellectual property is unjust. The intersection between both these avenues requires nuanced policies, which can balance the interests of both creators and consumers.

Achieving this balance is not only about legal and economic problems but also about resolving concerns such as sustainability and electronic waste. Providing access to repair information can foster a culture of reuse and sustainability.

Legislations should be moulded in such a way that it reflects the growing importance of the repairability of devices in the digital age. Clear exceptions combined with mandatory disclosure of information under Intellectual Property laws should be created. This leads to a framework that respects consumer autonomy without undermining the interests of the creators and innovators. As the movement becomes more relevant in the future, it presents an opportunity to reconsider how intellectual property can coexist to create a sustainable, accessible future.

Proceedings of the 7th International Conference on ICT for Sustainability, 314-320. < https://doi.org/10.1145/3401335.3401816 > ⁵⁴ S. Kyle Montello, 'The Right to Repair and the Corporate Stranglehold over the Consumer: Profits over People', (2020) 22 TUL. J.TECH. & INTELLECTUAL PROPERTY 165.

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⁵² Jin, Chen, Yang, Luyi, and Zhu, Cungen Right to Repair: Pricing, Welfare, and Environmental Implications (2023) 69(2) Management Science,1017-1036

https://doi.org/10.1287/mnsc.2022.4401>.

⁵³ Lepawsky, Josh, towards a World of Fixers Examining barriers and enablers of widely deployed third-party repair for computing within limits (2020),