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© Cadernos de Dereito Actual Nº 26. Núm. Ordinario (2024), pp. 59-84 ·ISSN 2340-860X - ·ISSNe 2386-5229

## A Trick of the (Virtual) Trade: a study on the challenges posed by cross-border e-commerce for national patent systems

Jorge Enrique de Azevedo Tinoco<sup>1</sup> Universidade de São Paulo (USP) Débora Barreto Santana de Andrade<sup>2</sup> Universidade de Fortaleza (UNIFOR)

**Summary:** 1. Introduction. 2. The rise of e-commerce and its relation to the national patent systems. 2.1. Transnational e-commerce and Free-on-Board (FOB). 2.2. National patent systems and the problem of importing patented products. 2.3. A matter of time: enforcement delays and their adverse effect on a patent owner's rights. 3. Pathways to enforcing a national court order overseas. 3.1. The transnational injunction dilemma. 3.2. The possibility of preliminary injunction measures. 3.3. Enforcing foreign decisions (and contempt of court orders) domestically. 4. Who is to blame when a violation occurs? 4.1. The chain of events in importation: in search of a model for liability attribution. 4.2. Importation rules and consumer liability. 4.3. Liability of the online seller. 5. Conclusion. 6. References.

Abstract: The rise of cross-border e-commerce creates a worldwide marketplace accessible to all - businesses and consumers alike. The international reach of electronic commerce provides unique challenges to patent owners, as infringing activity is enabled to occur transnationally, while innovators must rely on patent systems which are geographically confined. From the alluded context, this study aims to explore the challenges posed by transnational e-commerce to patent owners'

Recibido: 19/07/2024 Aceptado: 13/11/2024

DOI: 10.5281/zenodo.14171026

<sup>&</sup>lt;sup>1</sup> Lawyer. Associate at the Kasznar Leonardos Advogados law firm. Master of Laws (LL.M.) student at the University of São Paulo (USP) focusing on International Commercial Law. Postgraduate degree in International Law from the University of Fortaleza (UNIFOR). Bachelor of Laws (LL.B.) from the Federal University of Rio Grande do Norte (UFRN). Researcher at the International Law Observatory of Rio Grande do Norte (OBDI/UFRN). ORCID: <a href="https://orcid.org/0000-0001-8774-7438">https://orcid.org/0000-0001-8774-7438</a>. E-mail: <a href="mailto:jorge.tinoco@usp.br">jorge.tinoco@usp.br</a>.

<sup>&</sup>lt;sup>2</sup> Lawyer. Partner at the Rêgo e Santana Advogados Associados law firm. Professor in the International Law post-graduate course at the University of Fortaleza (UNIFOR). Guest professor in the International Business Course of the European Academic Institute. Doctor of Juridical Sciences (S.J.D.) and Master of Laws (LL.M.) from the CERIC of the Aix-Marseille Université (France). Bachelor of Laws (LL.B.) from the Federal University of Ceará (UFC). Email: deborabsantana@gmail.com.

rights and evaluate some of the most pressing issues towards curtailing cross-border infringement. Through the literature review conducted herein, results point to the fact that the difficulties associated with adjudicating infringement in a cross-border setting have led national judges to find "creative" solutions to the transnational infringement problem. The conclusions taken from this study suggest that the current commercial paradigm calls for a rethinking of the "nationally confined" nature of patent systems.

**Keywords**: Patents; Infringement; Transnational; E-Commerce; International Commerce.

**Resumo**: O crescimento do *e-commerce* transfronteiriço cria um mercado mundial e acessível a todos – empresas e consumidores indistintamente. O alcance internacional do comércio eletrônico provê desafios singulares aos titulares de patentes, uma vez que atividade infratora pode ocorrer em âmbito transnacional enquanto inovadores precisam se amparar em sistemas patentários geograficamente confinados. Neste contexto, o presente estudo busca explorar os desafios postos pelo *e-commerce* transnacional aos direitos dos titulares de patentes e avaliar alguns dos mais importantes pontos para combater a infração transfronteiriça. Por meio da revisão bibliográfica conduzida, os resultados apontam para o fato de que as dificuldades associadas com a adjudicação de casos de infração em um contexto transfronteiriço levaram juízes nacionais a encontrar soluções "criativas" ao problema da infração transnacional. As conclusões retiradas deste estudo sugerem que o atual paradigma comercial clama por uma reavaliação da natureza "nacionalmente confinada" dos sistemas patentários.

**Palavras-Chave:** Patentes; Infração; Transnacional; E-Commerce; Comércio Internacional.

#### 1. Introduction

Advancements in logistics and international trade have brought forth an incredible potential for commercial globalisation.<sup>3</sup> This statement rings particularly true when taking into account the widespread use of electronic tools for commerce in the last few decades.<sup>4</sup>

Cross-border electronic commerce is not only a manner by which companies can sell and acquire supplies amidst themselves in high-volume transactions, it also provides an open marketplace for consumers. Such traits have led a group of 71 members of the World Trade Organization (WTO) to initiate a work programme<sup>5</sup> for diplomatic talks in the context of harmonizing trade-related aspects of electronic commerce within the 11th WTO Ministerial Conference in December 2017. This intention was confirmed through a joint statement by 76 WTO members in January

<sup>&</sup>lt;sup>3</sup> SAVRUL, M.; INCEKARA, A.; SENER, S. "The Potential of E-commerce for SMEs in a Globalizing Business Environment", *Procedia - Social and Behavioral Sciences*, v. 150, nº 5, 2014, p. 35–45.

<sup>&</sup>lt;sup>4</sup> SHARMA, V. "*E-Commerce: evolution, meaning and types*", Indira Gandhi National Open University, April 10th, 2017. Available at: https://egyankosh.ac.in/handle/123456789/7646. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>5</sup> WTO. "Joint Initiative on E-Commerce", World Trade Organization, October 2023. Available at: https://www.wto.org/english/tratop\_e/ecom\_e/joint\_statement\_e.htm#participation. Accessed on: July 4th, 2024.

2019<sup>6</sup> and, as of October 2023, 90 WTO members are participating in discussions related to international e-commerce regulation.<sup>7</sup>

Along with further global integration, another byproduct of intense transnational trade is the rise of cross-border litigation, which puts pressure on a dated international framework which is often inadequate to address contemporary issues in digital trade.8 Such legal action, in turn, brings about the need for enforcement of decisions of an extraterritorial sort. This act of 'exporting' a domestic judgement abroad brings challenges of its own, even though some European states have found a considerable degree of success recognising these decisions amongst themselves.9

In the context of intellectual property, questions regarding cross-border infringement using the internet are not new. 10 Albeit developments to adapt the law to an interconnected and online world are often slow, copyright law has experienced significant reform to adjust itself to this new paradigm. A stark example of such adaptational effort is the Digital Millennium Copyright Act (DMCA). 11

Patent law, on the other hand, has not been as diligent. Though it is not uncommon to see cross-border infringement litigation in the field of patent law, 12 there is still plenty of room for international coordination among jurisdictions.

The national nature of patent systems<sup>13</sup> demands cooperation with foreign jurisdictions due to the insertion of such intrinsically domestic structures in an international market. The necessity of cooperation is in scope: it is needed both to enforce foreign judgements and to uphold the international principle of comity. 14

In this vein, this article aims to (i) define some of the challenges posed by cross-border e-commerce to national patent protection, (ii) explore how judgements are enforced in a cross-border setting and (iii) study liability attribution in a transnational online commercial transaction. These objectives are achieved through literature review of pertinent statutes, scholarly studies and case law15 on the fields

<sup>&</sup>lt;sup>6</sup> WTO. "Joint Statement on Electronic Commerce", World Trade Organization, January 25th, 2019. Available

https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/L/1056.pdf&Open=Tr ue>. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>7</sup> WTO, 2023, *Joint Initiative (...), Ob. cit.*<sup>8</sup> MITCHELL, A.; MISHRA, N. "Data at the Docks: Modernizing International Trade Law for the Digital Economy", Vanderbilt Journal of Entertainment & Technology Law, V. 20, nº 4, January 2018, p. 1073.

<sup>&</sup>lt;sup>9</sup> ZILINSKY, M. "Mutual Trust and Cross-Border Enforcement of Judgments in Civil Matters in the EU: Does the Step-by-Step Approach Work?", Netherlands International Law Review, Vol. 64, issue 1, April 2017, p. 115-139.

<sup>&</sup>lt;sup>10</sup> Discussions regarding cross-border infringement have become a larger point of focus in policy discussion with the increase in international trade. Section 4 of the TRIPS Agreement is one of the main sources of law which attempts to address cross-border policies to curtail

<sup>&</sup>lt;sup>11</sup> UNITED STATES OF AMERICA. "Digital Millennium Copyright Act", Legal Information Institute Ithaca, February 2022. Available https://www.law.cornell.edu/wex/digital\_millennium\_copyright\_act. Accessed on: July 4th,

<sup>12</sup> TRIMBLE, M. "Cross-Border Injunctions in U.S. Patent Cases and Their Enforcement Abroad", Marquette Intellectual Property Law Review, V. 13, nº 2, July 2009, p. 331.

<sup>&</sup>lt;sup>13</sup> HALL, B. H.; HELMERS, C. "The impact of international patent systems: Evidence from accession to the European Patent Convention", Research Policy, V. 48, nº 9, November 2019, p. 103810.

<sup>&</sup>lt;sup>14</sup> LEHMAN, J.; PHELPS, S. West's Encyclopedia of American Law. V. 3. 2nd ed. Ed. Thomson Gale, Detroit, 2004, p. 2. "Comity of nations is a recognition of fundamental legal concepts that nations share. It stems from mutual convenience as well as respect and is essential to the success of international relations".

<sup>&</sup>lt;sup>15</sup> While this study is transnational in nature, where possible, the article makes use of Brazilian legal sources. This choice is due to the familiarity of the authors with the Brazilian legal paradigm. Nevertheless, it is worth noting that Brazilian case law is especially scarce in this

of intellectual property, private international law (i.e.: "conflicts of law") and international commercial law.

#### 2. The rise of e-commerce and its relation to the national patent systems

The World Trade Organization (WTO) defines "electronic commerce" (or "ecommerce") as the "production, distribution, marketing, sale or delivery of goods and services by electronic means". This broad definition is well-reflective of the large scope of usage of electronic apparatuses in commerce. Despite what is quite common today, the first use of electronics for commercial purposes was not directly seen by or accessible to the consumer.

In fact, electronic means have been used for commercial purposes, in primitive stages, since the 1960s with the Electronic Data Interchange (EDI). The EDI served primarily as a Business-to-Business (B2B) sales management tool having no interaction with the final consumer whatsoever. The reasons for this limitation were quite evident: computer technology was not easily accessible to the average consumer in the 1960s, and the internet was still at its embryonic stages with the ARPANET. In

With the rise of personal computers and the advent of the internet, however, that landscape changed drastically. Electronic commerce is no longer limited to B2B models. There are websites now which cater to most modes of commerce, be it Business-to-Business<sup>20</sup> (B2B), Business-to-Consumer<sup>21</sup> (B2C), Consumer-to-Business<sup>22</sup> (C2B), or Consumer-to-Consumer<sup>23</sup> (or C2C). Indeed, e-commerce in the 21st century offers a wide web-based marketplace that is in constant development especially in Asian markets, such as China.<sup>24</sup> By some estimates focused especially on the growth of transnational e-commerce in emerging markets, it is estimated that, by 2028, the global expenditure with cross-border e-commerce will surpass a staggering USD 3 trillion.<sup>25</sup>

Establishing a consumer-focused market with global reach has many advantages - particularly for sellers in developing countries.<sup>26</sup> Some of the upsides

field. While cases of patent infringement through importation were tried in Brazil in the past, such cases do not involve patent infringement in the e-commerce context (e.g.: recently, the Bayer v. EMS case regarding the pharmacological active ingredient rivaroxaban, tried by the State Court of São Paulo under the no. 1000349-17.2019.8.26.0229). Thus, with the lack of Brazilian jurisprudence, it is especially important to look to how other jurisdictions solved such issues when presented with them. With that said, the legal cases cited herein are representative of the main legal families worldwide, namely Civil Law (e.g.: Germany) and Common Law (e.g.: Canada, United States of America).

<sup>&</sup>lt;sup>16</sup> TUTHILL, L. "e-Commerce and the WTO", Permanent Missions of Mexico, Indonesia, the Republic of Korea, Turkey, Australia (MIKTA) to the World Trade Organization, July 5th, 2016. Available at: https://www.wto.org/english/forums\_e/business\_e/1\_1\_TUTHILL.pdf. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>17</sup> SHARMA, 2017, E-Commerce (...), Ob. cit.

<sup>&</sup>lt;sup>18</sup> SHARMA, 2017, E-Commerce (...), Ob. cit.

<sup>&</sup>lt;sup>19</sup> MARKOFF, J. "An Internet Pioneer Ponders the Next Revolution", The New York Times, December 20th, 1999. Available at: https://archive.nytimes.com/www.nytimes.com/library/tech/99/12/biztech/articles/1220990 utlook-bobb.html?Partner=Snap. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>20</sup> e.g., BulkBookstore.com.

<sup>&</sup>lt;sup>21</sup> e.g., Amazon.com.

<sup>&</sup>lt;sup>22</sup> e.g., Yelp.com.

<sup>&</sup>lt;sup>23</sup> e.g., eBay.com.

<sup>&</sup>lt;sup>24</sup> MA, S.; CHAI, Y.; ZHANG, H. "Rise of Cross-border E-commerce Exports in China", *China* & *World Economy*, Vol. 26, no 3, 2018, p. 63–87.

<sup>&</sup>lt;sup>25</sup> JUNIPER RESEARCH. "33% of eCommerce Spend to Be Cross-border by 2028 Globally, as e-Commerce Growth Shifts to Developing Markets", Juniper Research, November 4th, 2023 Available at: https://www.juniperresearch.com/press/press-releases/33-of-ecommerce-spend-to-Be-cross-border-by-2028. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>26</sup> SAVRUL; INCEKARA; SENER, 2014, The Potential (...), Ob. cit.

inherent to international commerce are: (i) access to wealthier consumers, (ii) wider reach, (iii) increased brand awareness, and (iv) wider market for low-demand domestic products. These benefits are attractive to small and big businesses alike. Nonetheless, such advantages were not always worth the hassle of undergoing the process required for trading internationally.

In the first stages of the 20th century, the amount of capital required to engage in international trade was still prohibitively substantial for most small and medium enterprises (SME) - a concept often referred to as 'barriers to entry'. Technological and socio-political developments (especially after World War II), however, have turned the page onto a new century of international commerce. Products could now be shipped overseas in a quicker and much more affordable manner. Although some hassles regarding tariffs and a lack of international commercial frameworks still endure, the overall barriers to international trade are in a steady decline.

Data from the Organisation for Economic Cooperation and Development (OECD)<sup>29</sup> points to some of the most relevant costs involved with international trade and their subsequential sharp decline in the decades that followed World War II. According to the OECD, figures collected between the years 1930 and 2003 point to the fact that the price of sea freight dropped around 77,68%, while the cost of passenger air transport fell 89,53% and the cost of international calling decreased by 99,93%.

Although the drop in costs was substantial, in the middle of the 20th century there was still no feasible cost-effective way to establish a business model which was, at the same time, cross-border, on-demand and retail. A few decades forward, with the astonishing growth of the internet and e-commerce, along with the rise of online retail giants, 30 smaller vendors have found in these companies an interesting partner to make their products available in a much wider scale. According to Ma, Chai and Zhang (2018), the trade volume of Chinese vendors who have been expanding their distribution channels to international trading platforms increased by 200 percent in 2016, and around 80% of such vendors are concurrently operating in some of the aforementioned online retail platforms.

Given this scenario of substantial growth, focus is now shifted to one of the main tools that allow this international B2C commerce to work: the international standardised term known as Free-on-Board (FOB) and its diverse interpretations.

#### 2.1. The rise of e-commerce and its relation to the national patent systems

Free-on-Board (FOB) is a term widely used in international trade and standardised by the International Chamber of Commerce (ICC) in its Incoterms.<sup>33</sup> Be that as it may, there are certain controversies regarding the usage of "FOB", specifically in the United States. The source of contention over the meaning of the term stems from a disparity between two sources: the Incoterms definition and the

 $<sup>^{27}</sup>$  LAZAROFF, D. E. "Entry Barriers and Contemporary Antitrust Litigation", *Business Law Journal*, Vol. 7,  $^{6}$  1, December 2006.

<sup>&</sup>lt;sup>28</sup> ORTIZ-OSPINA, E.; BELTEKIAN, D. *"Trade and Globalization"*, Our World in Data, October 2018. Available at: https://ourworldindata.org/trade-and-globalization. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>29</sup> This data was organised by Ortiz-Ospina & Beltekian (2018), but originally published by the OECD (2013). OECD. *"Economic Globalisation: Origins and consequences"*, Organisation for Economic Co-operation and Development, 2013. Available at: https://www.oecd-ilibrary.org/economics/economic-globalisation\_9789264111905-en. Accessed on: July 4th, 2024; ORTIZ-OSPINA, BELTEKIAN, 2018, *Economic Globalisation (...)*, *Ob. cit.* 

<sup>&</sup>lt;sup>30</sup> e.g., AliExpress, DHgate, Amazon and eBay.

<sup>&</sup>lt;sup>31</sup> MA; CHAI; ZHANG, 2018, Rise of Cross-border (...), Ob. cit.

<sup>32</sup> MA; CHAI; ZHANG, 2018, Rise of Cross-border (...), Ob. cit.

<sup>&</sup>lt;sup>33</sup> INTERNATIONAL CHAMBER OF COMMERCE. *Incoterms* ® 2020. 1st ed. Ed. ICC, Paris, 2019.

definition adopted by the Uniform Commercial Code (UCC), found in Section 2-319(1).

While the internationally adopted definition (Incoterms) refers to FOB as a term exclusively meant to represent the division of responsibilities when a shipment is sent by sea or inland waterway, 35 the definition of the UCC is much less restrictive. UCC § 2-319 (1) allows for two interpretations on what comprises the aforementioned responsibilities, the two being "FOB the place of shipment" and "FOB the place of destination". 36 Furthermore, the UCC definition also allows for FOB agreements to occur under any mode of transportation, be it "vessel, car, or other vehicle". 37

With this said, it is important to be reminded that the UCC is not a "code" in the civil law sense but is rather much closer to a "model law", proposed by the American Law Institute (AIL), which does not preclude acceptance and incorporation by the individual states within the United States of America (USA), something which was largely done by all 50 states with minor modifications.<sup>38</sup>

Thus, the adoption of the definitions proposed by the Incoterms and the UCC varies significantly due to their origin and breadth. While the Incoterms were an expression of rules developed by merchant practice (an expression of lex mercatoria)<sup>39</sup> compiled and revised by the ICC, the UCC is a model law widely adopted within the USA, but not much anywhere else. In this sense, it is not surprising that the Incoterms find more adoption in international commerce than the meanings contained in the UCC.

Hence, for the purposes of this article, we shall employ the term "FOB" in its international denotation, following the Incoterms guidelines. Therefore, FOB will be referred to as the responsibility of a seller to deliver the goods cleared for export onto a named vessel at the port of shipment, at which point the responsibility and costs pass on to the buyer. $^{40}$ 

In the same vein, when referring to other types of responsibility sharing involving any means of transportation (including by sea), the terms most often used will be "Free-Carrier" (FCA), "Delivered at Place" (DAP) or "Delivered Duty Paid" (DDP). FCA is applied in cases in which the responsibility of the seller is to make the goods available and cleared for export at a specific place<sup>41</sup> at which point responsibility and costs pass on to the buyer. DAP is the term used when the responsibility of the seller is to deliver the goods to a named place by the buyer,<sup>42</sup> however, the buyer still has to bear any costs regarding customs clearance and taxes.<sup>43</sup> DDP is much like the DAP agreement, except the seller still has to bear costs regarding customs clearance and taxes.<sup>44</sup>

<sup>&</sup>lt;sup>34</sup> JONES, J. *"FOB: You Keep Using That Word. I Do Not Think It Means What You Think It Means"*, Lexology, November 6th, 2017. Available at: https://www.lexology.com/library/detail.aspx?g=2b05e1cd-ffeb-4dd5-8041-e512f6779a08. Accessed on: July 4th, 2024.

<sup>35</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, Incoterms® (...), Ob. cit.

<sup>&</sup>lt;sup>36</sup> UNITED STATES OF AMERICA. "Uniform Commercial Code", Legal Information Institute (LII), Ithaca, 2012. Available at: https://www.law.cornell.edu/ucc/2/2-319. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>37</sup> UNITED STATES OF AMERICA, 2012, *Uniform Commercial (...)*, Ob. cit.

<sup>&</sup>lt;sup>38</sup> DALHUISEN, J. H. *Dalhuisen on Transnational and Comparative Commercial, Financial and Trade Law Volume 1: The Transnationalisation of Commercial and Financial Law. The Lex Mercatoria and its Sources.* V. 1. 8th ed. Ed. Hart Publishing, Oxford, 2022, p. 243.

<sup>&</sup>lt;sup>39</sup> COSTA, J. A. F. "A Autonomia da Nova Lex Mercatoria e a Estabilização de Relações Comerciais Internacionais", *Revista do Instituto do Direito Brasileiro*, V. 2, nº 6, 2013, p. 4783–4810.

<sup>&</sup>lt;sup>40</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, *Incoterms*® (...), Ob. cit.

<sup>&</sup>lt;sup>41</sup> e.g., the seller's own premises.

<sup>&</sup>lt;sup>42</sup> e.g., buyer's house or place of business.

<sup>&</sup>lt;sup>43</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, *Incoterms*® (...), Ob. cit.

<sup>&</sup>lt;sup>44</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, *Incoterms*® (...), Ob. cit.

In this respect, some e-commerce websites<sup>45</sup> deal with a massive number of sellers and buyers, and, therefore, need to cater to a large quantity of different market actors with different needs. Hence, the referred companies often offer educational material on the meaning of some of the Incoterms on their seller support pages.<sup>46</sup>

With this in mind, FOB has been described by Alibaba as "probably the most popular agreement, especially if shipping from China".<sup>47</sup> The low cost of maritime freight<sup>48</sup> allied with FOB's lack of responsibility for importing taxes and customs (for the vendor) makes the FOB agreement a viable option for many small merchants and allows these potential sellers to offer their products at a low cost - often lower than most internal markets.<sup>49</sup>

The lower prices offered by international sources are one of the main attractions for buyers. In this sense, it is not uncommon to see e-commerce marketplaces being used to offer counterfeit goods. <sup>50</sup> And, in a sense, a counterfeiter selling under a legitimate website may bring some benefits to the legal platform, such as: increased traffic, increased number of sellers and buyers, and an increase in revenue. <sup>51</sup> Many of these counterfeit goods are made in violation of trademark and copyright. <sup>52</sup> However, a less common and harder to detect violation still looms in such environments: patent infringement.

# 2.2. National patent systems and the problem of importing patented products

The legal and philosophical justification for patent systems is often to encourage inventive behaviour. Such was the intention behind the US Constitution in its Commerce Clause: To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries. The same can be said of the Brazilian Constitution in article 5, item XXIX: [...] statute will grant the authors of industrial inventions the temporary privilege over its utilisation, as well as protection over the industrial creations, the property of trademarks, company names and other

<sup>46</sup> ALIBABA. "Incoterms Guide", Alibaba.com Seller Central, October 2020. Available at: https://seller.alibaba.com/businessblogs/px577140-incoterms-guide. Accessed on: July 4th, 2024.

<sup>48</sup> MERK, O. "Maritime transport: too cheap to be good". Shipping Today, April 8th, 2016. Available at: https://shippingtoday.eu/maritime-transport/. Accessed on: July 4th, 2024.

<sup>53</sup> DE AZEVEDO TINOCO, J. E. "Reformulando Promessas: das Teorias e Objetivos dos Sistemas de Propriedade Intelectual", *Revista FIDES*, V. 12, nº 1, September 2021, p. 908–926.

<sup>&</sup>lt;sup>45</sup> e.g., Alibaba/AliExpress.

<sup>&</sup>lt;sup>47</sup> ALIBABA. "Understanding Incoterms: Free on Board (FOB)", Alibaba.com Seller Central, September 2020. Available at: https://seller.alibaba.com/businessblogs/pxgl1342-understanding-incoterms-free-on-board-fob. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>49</sup> SEMUELS, A. *"The Problem With Buying Cheap Stuff Online"*, The Atlantic, May 22nd, 2018. Available at: https://www.theatlantic.com/technology/archive/2018/05/wish-china-cheap-stuff/560861. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>50</sup> TREADWELL, J. "From the car boot to booting it up? eBay, online counterfeit crime and the transformation of the criminal marketplace", *Criminology & Criminal Justice*, V. 12, issue 2, April 2012, p. 175–191.

<sup>&</sup>lt;sup>51</sup> KENNEDY, J. P. "Counterfeit Products Online", in (HOLT, T. J.; BOSSLER, A. M. ed.), *The Palgrave Handbook of International Cybercrime and Cyberdeviance*, Ed. Springer International Publishing, New York, 2020, p. 1001–1024.

<sup>&</sup>lt;sup>52</sup> e.g., branded film merchandise.

<sup>&</sup>lt;sup>54</sup> UNITED STATES OF AMERICA. "Constitution of the United States of America", Legal Information Institute (LII), Ithaca, 1787. Available at: https://www.law.cornell.edu/constitution. Accessed on: July 4th, 2024.

distinctive signs, bearing in mind the social interest and the economic and technological development of the country". 55

The set of rights awarded to patent holders may vary from country to country. Notwithstanding, there are some entitlements which are as close to "universal" as one may come. Among these common prerogatives given to patent holders is the right of importation and exportation of a patented product. Such exclusive privilege is present in the patent systems of many countries, such as the United States<sup>56</sup> and Brazil.<sup>57</sup>

These rights prohibit the importation of a product that incorporates the technology protected by a national patent into the territory of that specific country. For illustrative purposes, should a Russian company sell a product which infringes upon a Brazilian patent exclusively to the Russian market, the Brazilian patent holder has no legal claim to make. However, if the foreign seller were to import such a product to the patent holder's country, such an act could give rise to a claim for patent infringement.

Common procedure in some countries, including Brazil,<sup>58</sup> involves a notification from the customs authority when there is a suspicion of intellectual property infringement. In such circumstances it is far easier for a customs operator to be suspicious over trademark or copyright infringement than it is to suspect patent infringement. The reason for this is quite simple: copyrighted works<sup>59</sup> and trademarks<sup>60</sup> are much more recognisable than patented inventions.

Furthermore, when dealing with customs clearance, operators are far more likely to suspect bulk, high-volume purchases ordered by resellers inside the country, than they are of individual purchases made by consumers. Additionally, some patented inventions are merely components of a final product.<sup>61</sup>

In this sense, one cannot reasonably expect the customs authority to be able to ascertain (or even be suspicious of) patent infringement with a reasonable degree of certainty, as inventions may be characterised by complex nuances which become apparent only to the trained eye. This is precisely why patent holders need to be ever vigilant for any credible infringement source in the internal market where the patent is valid.

The reason that gives rise to concern over these imports in international ecommerce is that although there are a few international agreements that attempt to harmonise and conform the national patent systems, there is no global patent system.<sup>62</sup>

<sup>&</sup>lt;sup>55</sup> BRAZIL. "Constituição da República Federativa do Brasil", Diário Oficial da República Federativa do Brasil, Poder Executivo, Brasília, October 5th, 1988. Available at: http://www.planalto.gov.br/ccivil\_03/constituicao/constituicao.htm. Accessed on: July 4th, 2024. The snippet shown above is a free translation of the original text which, in Portuguese, reads as: "a lei assegurará aos autores de inventos industriais privilégio temporário para sua utilização, bem como proteção às criações industriais, à propriedade das marcas, aos nomes de empresas e a outros signos distintivos, tendo em vista o interesse social e o desenvolvimento tecnológico e econômico do País".

<sup>&</sup>lt;sup>56</sup> UNITED STATES OF AMERICA. "United States Code 35 U.S. Code § 271 - Infringement of patent", Legal Information Institute (LII), Ithaca, 2010. Available at: https://www.law.cornell.edu/uscode/text/35/271. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>57</sup> BRAZIL. *"Lei nº 9.279, de 14 de maio de 1996"*, Diário Oficial da República Federativa do Brasil, Poder Executivo, Brasília, May 14th, 1996. Available at: http://www.planalto.gov.br/ccivil\_03/leis/l9279.htm. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>58</sup> BRAZIL. "Decreto nº 6.759, de 5 de fevereiro de 2009 (Law of Customs Regulation)", Diário Oficial da República Federativa do Brasil, Poder Executivo, Brasília, February 5th, 2009. Available at: http://www.planalto.gov.br/ccivil\_03/\_ato2007-2010/2009/decreto/d6759.htm. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>59</sup> e.g., film and videogame characters.

<sup>&</sup>lt;sup>60</sup> e.g., high-end fashion brands.

<sup>&</sup>lt;sup>61</sup> e.g., a patented lens inside the camera of a mobile phone.

<sup>&</sup>lt;sup>62</sup> HALL; HELMERS, 2019, *The impact (...)*, Ob. cit.

Advancements in harmonization in the field of intellectual property are far from new. The Paris Convention for the Protection of Industrial Property ("Paris Convention", 1883) set some of the most fundamental international principles for the protection of patents. A century later, the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS", 1994) further expanded on the harmonization efforts, now under the administration of the WTO.

However, even though these international efforts have led to a relevant degree of harmonization, they have not created an international patent system. Hence, although the overall policy regarding intellectual property law may be the object of discussion at international forums, the fact remains unchanged that innovators must live with the fact that patent prosecution and protection remain strictly national. While important international tools make the multi-territorial prosecution of patents more convenient (such as the tools present in the Patent Cooperation Treaty – PCT), the first experiment with a true multi-national patent system involving both prosecution and protection was taken recently, by some European Countries, through the unitary patent and the Unified Patent Court (UPC).<sup>64</sup>

Whether or not there is a need for a global all-encompassing patent system is an ambitious and multi-layered question, far too complex to be answered in a single article. However, in a world where international commerce is the norm and patent systems are strictly national, a certain degree of international cooperation is bound to be required.

With that said, TRIPS has made available a few mechanisms to curtail cross-border infringements from taking place.<sup>65</sup> Part III, Section 4 of said agreement describes a set of procedures under which the intellectual property holder applies to the customs authority seeking the seizure of the infringing products.<sup>66</sup> The procedures enshrined in Section 4 are detailed and provide a clear path to the protection of one's intellectual property assets.<sup>67</sup> Nevertheless, those procedures are challenging to follow when the infringing products are sold individually in retail.

Additionally, when considering products being sold in retail and entering customs individually, some may argue for the use of the 'de minimis' defense, enshrined in Article 60 of TRIPS.<sup>68</sup> Notwithstanding the possibility of pleading de minimis, this approach would be unstable at best. The reason for the dismissal of such a defence is that, even though products are not being shipped in bulk, the act of importation is commercial in nature and deliberate at least from the seller's point of view. Furthermore, the vendor is presumed to be a regular merchant, therefore, his actions are probably not going to be limited to a single act of infringement which can be dismissed.<sup>69</sup>

<sup>&</sup>lt;sup>63</sup> Some examples of these international principles include the right to priority, the right to national treatment and the principle of independence among patentes.

<sup>&</sup>lt;sup>64</sup> WSZOŁEK, A. "Still Unifying? The Future of the Unified Patent Court". *IIC - International Review of Intellectual Property and Competition Law*, V. 52, no 9, October 2021, p. 1143–1160.

<sup>65</sup> WTO. "Annex 1C: Agreement on Trade-Related Aspects of Intellectual Property Rights", World Trade Organization, Montevideo, April 15th, 1994. Available at: https://www.wto.org/english/docs\_e/legal\_e/27-trips.pdf. Accessed on: July 4th, 2024.
66 WTO, 1994, Annex 1C (...), Ob. cit.

<sup>&</sup>lt;sup>67</sup> It is important to note that Part III, Section 4, Article 51 of TRIPS only makes explicit mention of 'counterfeit trademark goods' or 'pirated copyright goods'. Therefore, member-countries could argue that the provisions in Section 4 are not applicable to patents - therefore, making vigilance duties harder still for the patent holder.

<sup>&</sup>lt;sup>68</sup> WTO, 1994, *Annex 1C (...)*, Ob. cit., p. 345, part III, s. 3, article 60.

<sup>&</sup>lt;sup>69</sup> An act of infringement can be ignored under the de minimis doctrine if the object (or objects) being imported consists of 'small quantities of goods of a non-commercial nature'. In this sense, pleading de minimis would be more suitable for a defendant who has brought an infringing product from a trip in a personal luggage for purely personal and non-commercial purposes.

To summarise, in the context of transnational retail e-commerce, the problems presented so far regarding patents are twofold: (i) products are bought individually, making it harder to seize in customs and (ii) the enforceability of patents is strictly national (in most cases). 70 Nonetheless, there are other matters to consider when dealing with patents.

# 2.3. A matter of time: enforcement delays and their adverse effect on a patent owner's rights

Intellectual Property Rights (IPR) are a very distinct form of property. Whereas most forms of property do not have a limited time in which they are considered to be part of someone's estate, IPR, in general, are subjected to the ticking of the clock from their very origins. In this context, trademarks are one of the few forms of IPR that are not subject to term limitation, as they can be renewed indefinitely as long as the brand is still commercially active.

One reason for this limitation on IPR has its roots in the aptly called 'utilitarian theory' and the need to strike a balance between providing incentives for innovators and curtailing the natural tendencies of property rights to exclude others from enjoying such inventions and other creative works. $^{71}$ 

Patents are, in this sense, one of the most time-sensitive property titles – seeing as patents have one of the shortest terms of any of the IPR. By virtue of the TRIPS Agreement, the agreed-upon term of patents for most countries around the world is twenty years from the day of filing.<sup>72</sup> Even considering the short lifespan of patents, the effective time for this mode of IPR may be even smaller due to prosecution delays – most of which are caused by backlog.<sup>73</sup> A study from 2016 pointed to the fact that the average granted application age for some countries can reach ten years from the first date of filing.<sup>74</sup>

This topic was a heavy focus of discussion in Brazil after a decision from the Brazilian Federal Supreme Court (" $A\varsigma\~ao$  Direta de Inconstitucionalidade no. 5529" – ADI 5529) deemed a statutory provision safeguarding a minimum 10-year term for Brazilian patents to be unconstitutional. The decision in ADI 5529, in turn, spurred a wave of litigation<sup>75</sup> seeking patent term adjustment (PTA) due to the unjustified delay by the Brazilian Patent and Trademark Office (BRPTO). Most of these lawsuits are still underway, but the overall trend seems to be unfavourable to the PTA thesis.

<sup>&</sup>lt;sup>70</sup> The present article will address some of the possibilities regarding transnational injunctions and monetary damages awards in Section 3.

<sup>&</sup>lt;sup>71</sup> FISHER III, W. "Theories of Intellectual Property", in (MUNZER, S. R. ed.) *New Essays in the Legal and Political Theory of Property*. 1st ed. Ed. Cambridge University Press, Cambridge, 2001, p. 29.

<sup>&</sup>lt;sup>72</sup> WTO, 1994, *Annex 1C (...)*, Ob. cit., p. 334, part II, s. 5, article 33.

<sup>&</sup>lt;sup>73</sup> Backlog may be succinctly described as the cumulation of filings which exceeds the capacity of examination and, in turn, causes delays from the Patent Office (PTO) and hampers the process of patent examination. Therefore, backlog can effectively shorten a patent term if the PTO is not capable of finalizing examination in a timely manner

<sup>&</sup>lt;sup>74</sup> SCHULTZ, M.; MADIGAN, K. *The Long Wait for Innovation: the Global Patent Pendency Problem,* Ed. Center for the Protection of Intellectual Property, Arlington, 2016.

<sup>&</sup>lt;sup>75</sup> LEONARDOS, G.; REZENDE, L. R. V.; DE AZEVEDO TINOCO, J. E. "Anpassung der Wirksamkeitsdauer von Patenten in Brasilien: eine Stellungnahme der brasilianischen Justiz", *Mitteilungen der Deutsch-Brasilianischen Juristenvereinigung*, V. 41, nº 1, October 2023, p. 11–34.

<sup>&</sup>lt;sup>76</sup> The name "Brazilian Patent and Trademark Office" is used to communicate the goals and scope of this government agency's activities more closely and to create a ready parallel to other national counterparts, such as the United States Patent and Trademark Office (USPTO). However, the agency's name, in Portuguese, is "Instituto Nacional da Propriedade Industrial" (INPI), which most closely translates to "National Institute of Industrial Property".

<sup>&</sup>lt;sup>77</sup> LEONARDOS; REZENDE; DE AZEVEDO TINOCO, 2023, Anpassung der (...), Ob. cit., p. 31.

Although damages may often be sought retroactively,<sup>78</sup> patent owners are commonly more concerned with halting infringement than seeking damages. In this sense, while damages provide a way to garner some compensation for infringement, injunctions are not available if the patent is still under examination in the patent office (PTO). This point is important to illustrate how administrative delays erode patent protection and, therefore, make patents of a given country substantially weaker and less desirable.

The same can be said of delays in legal disputes regarding patents. Should a judge not grant a preliminary injunction in an infringement case, every day without such measure means one more day of allowing infringement to happen and one less day of coverage by the patent term. From this perspective, the time-related depreciation of such assets encourages the patent holder to act quickly and request preliminary measures to the magistrate, which are seldom granted – especially due to the heavily technical nature of patent infringement lawsuits.

Hence, delays cause adverse effects to the patent owner's rights wherever they may stem from, be it from the PTO, faulty customs authority action or from a court's slow pace of proceedings. In the international context, however, the opportunities for delay multiply, as coordinated action from multiple jurisdictions is known to perform at a sub-optimal pace.<sup>79</sup>

Remedies to such inefficiencies in a cross-border setting could be attained from the development of a multinational patent which may rely on a likewise multinational enforcement system. However, such goals are knowingly ambitious, and an international patent system is, at the moment, the object of early discussions at the World Intellectual Property Organization (WIPO) through the Draft Substantive Patent Law Treaty (SPLT). Conversely, at the regional level, experiments are being conducted within Europe through the unitary patent and the Unified Patent Court (UPC).<sup>80</sup>

In the meantime, while no true international solution is reached, innovators must rely on notions of private international law (in the "conflict of laws" sense), which are still underdeveloped in the field of intellectual property,<sup>81</sup> to seek cross-border enforcement of their IPR. Hence, the threat of delays is still a very relevant obstruction in the path towards multinational enforcement of patents.

### 3. Pathways to enforcing a national court order overseas

As discussed *supra*, infringement has the potential to occur at a rapid pace, and the traits particular to patent litigation make it a slow endeavour to undertake. This scenario is specifically prevalent in litigation seeking to enjoin acts of cross-border infringement, as coordination between multiple laws, jurisdictions and legal orders makes it costly and time-consuming to attain the appropriate legal remedy – notably injunctions.

With this in mind, the present section aims at discussing some of the most pressing issues to curtail acts of infringement transnationally, namely: (i) the

<sup>&</sup>lt;sup>78</sup> These retroactive damages are often limited only by rules concerning the statute of limitations.

<sup>&</sup>lt;sup>79</sup> DE AZEVEDO TINOCO, J. E.; MACHADO, P. E. M.; CLEMENTINO, M. B. M. "Conectando Pontos: Cooperação Jurídica Internacional e os Desafios Impostos pelas Redes Distribuídas", in (MENEZES, W. ed.), *Direito Internacional em Expansão*. V. 21. 1st ed. Ed. Arraes Editores, Belo Horizonte, 2021, p. 231–249.

<sup>&</sup>lt;sup>80</sup> DREYFUSS, R. C. "Launching the Unified Patent Court: Lessons from the United States Court of Appeals for the Federal Circuit", in (DESAUNETTES-BARBERO, L.; DE VISSCHER, F.; STROWEL, A.; CASSIERS, V. ed.), *The Unitary Patent Package & Unified Patent Court: problems, possible improvements and alternatives*. V. 1. 1st ed. Ed. Ledizioni, Milan, 2023, p. 73–95.

DINWOODIE, G. B. "Developing a Private International Intellectual Property Law: The Demise of Territoriality?", *William and Mary Law Review*, V. 51, no 2, 2009, p. 711–800.

effectiveness of cross-border enactment of judicial decisions (specifically injunctive orders), (ii) the availability of preliminary remedies against infringement; and (iii) the enforcement of transnational contempt of court orders and measures against non-compliance.

### 3.1. The transnational injunction dilemma

Court orders usually have a strictly national reach. Some exceptions apply, of course, most notably for international and regional courts. Nevertheless, the universal reach of these international courts is derived from the concept of 'universal jurisdiction', which is reserved for crimes so grave that such actions are considered to be harmful to the entire international community, 82 and regional courts are established for specific purposes and through proper instruments. Patent infringement (barring infringement tried under the jurisdiction of the European UPC) certainly does not qualify under these strict specifications.

With this in mind, patent infringement suits must be filed in the country where the violation takes place. For illustrative purposes, if a United States patent is infringed upon by a Brazilian company exporting a given product into the USA, the patent holder would file suit in a United States district court. The challenge then becomes 'exporting' this court order, so that it may produce effects in a foreign territory.<sup>83</sup>

The process of submitting a national judgement to the appreciation of a foreign judge is often referred (notably in civil law countries) as *exequatur*.<sup>84</sup> Obtaining an exequatur from a foreign jurisdiction is far from automatic. In most cases, the request has to undergo a form of vetting from the foreign court. The varying wait times associated with this analysis give rise to some of the problems described in the last section.

In Brazil, for example, when judging an exequatur, courts take into account whether: (i) the national court was competent to judge that particular subject matter; (ii) the parties were capable to enter into agreements or undertake legal responsibilities; (iii) there was due process and ample chance for defence; (iv) the judgement does not violate Brazilian public policy, sovereignty or human dignity; (v) there is no conflict between the decision to be recognised and a previous final domestic decision on the same matter and involving the same parties; (vi) the decision is valid, lawful and enforceable in the jurisdiction where it was rendered; (vii) the request is presented alongside a certified copy of the national judgment to be recognised alongside a sworn translation and an authentication by the competent Brazilian consular authority; (viii) the national judgement is sufficiently reasoned.<sup>85</sup>

The process required by the Brazilian legal system presents some hurdles to foreign plaintiffs. Nevertheless, there is still a clear path to the enforcement of foreign judgements, and, if the proceedings go unopposed and the formal requirements listed above are met, an exequatur does not take very long to attain. If there is opposition, however, the discussion may be prolonged and the scope of examination may expand itself towards aspects not entirely connected to the formal requirements set above.<sup>86</sup>

<sup>&</sup>lt;sup>82</sup> PHILIPPE, X. "The principles of universal jurisdiction and complementarity: how do the two principles intermesh?", *International Review of the Red Cross*, Vol. 88, issue 862, June 2006, p. 375–398.

<sup>.83</sup> TRIMBLE, 2009, Cross-Border Injunctions (...), Ob. cit.

<sup>&</sup>lt;sup>84</sup> BOUVIER, J. *A Law Dictionary, Adapted to the Constitution and Laws of the United States of America, and of the Several States of the American Union: With References to the Civil and Other Systems of Foreign Law.* V. 2. 1st ed. Ed. Forgotten Books, London, October 9th, 2011. 
<sup>85</sup> GRION, R. S.; ANDRADE SILVA, G. P. "Brazil", in (FALACH, A. ed.) *The International Comparative Legal Guide to: Enforcement of Foreign Judgments 2018*. 3rd ed. Ed. Global Legal Group, London, 2018, p. 40–46.

<sup>&</sup>lt;sup>86</sup> For a thorough review of the Brazilian *exequatur* proceedings referring to judgments from the USA, see: MOURA, C. A. B.; DE AZEVEDO TINOCO, J. E.; CLEMENTINO, M. B. M. "Sentenças Estadunidenses no Judiciário Brasileiro: o Estado da Arte e Perspectivas para o

Conversely, in other countries, such as Sweden, may not even recognise foreign decisions unless they are required to do so by force of treaty or other legislation.<sup>87</sup> With this in mind, it is crucial that a prospective petitioner knows how other countries approach the recognition and enforcement of judicial sentences made abroad and what is the process (and even whether or not such pathways exist) to request such recognition.

From this perspective, it becomes clear that seeking out foreign enforcement of a domestic judgement is not a trivial matter, since some countries are either unwilling to enforce an external judgement or put significant restrictions in place that may render enforcement essentially unattainable. In this vein, one may find the enforcement of decisions regarding patents particularly questionable, since patent systems are mostly national and have a considerable number of local differences from one another. And these differences, in turn, may bring into play the "public policy" debate.

"Public policy" is an exception in private international law that has long been the focus of controversies regarding its perceived uncertainty.<sup>88</sup> The exception to which the term refers may be described as an allowance that 'a forum may exclude the foreign law designated by its own choice of law rules or refuse to enforce a foreign judgment otherwise entitled to enforcement if the application of the foreign law or the enforcement of the foreign judgment would be contrary to the forum's public policy'.<sup>89</sup>

However, USA-based quantitative research has indicated that, though theoretically possible, United States courts have seldom used the public policy exception to repeal foreign decisions. 90 One of the reasons which may be responsible for the lack of use of the public policy exception is that prohibiting injunctions that target infringement which happens solely on the US may not affect the enforcing a country's public policy at all. 91

Be that as it may, there are still instances in which injunctions may be construed as interfering with a foreign country's public policy. Illustrative of this hypothesis is the judicial order that has been awarded in *O2 Micro International Ltd. v. Sumida Co.* <sup>92</sup> (hereinafter "*Sumida*") and another, in a future case involving the same plaintiff, in *O2 Micro International Ltd. v. Beyond Innovation Technology Co.* <sup>93</sup> (hereinafter "*Beyond*"). In both instances, the Court of the Eastern District of Texas granted a permanent injunction requiring the defendants to label prominently their infringing products and accompanying literature with the words "Not for Sale in, Use in, or Importation into the United States". <sup>94</sup>

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Futuro", in (MENEZES, W. ed.), *Direito Internacional em Expansão*. 1st ed. Ed. Arraes Editores, Belo Horizonte, 2022, p. 248–258.

<sup>&</sup>lt;sup>87</sup> ÅKERLUND, T.; HOPE, J. "Litigation: Enforcement of Foreign Judgments in Sweden", Lexology, February 1st, 2019. Available at: https://www.lexology.com/library/detail.aspx?g=4041d830-2c95-430b-b6fa-8fcec85ff2f6. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>88</sup> MILLS, A. "The Dimensions of Public Policy in Private International Law", *Journal of Private International Law*, V. 4, no 2, August 2008, p. 201–236.

<sup>&</sup>lt;sup>89</sup> ENONCHONG, N. "Public Policy in the Conflict of Laws: A Chinese Wall around Little England?", *The International and Comparative Law Quarterly*, V. 45, no 3, 1996, p. 633–661. <sup>90</sup> TRIMBLE, 2009, *Cross-Border Injunctions* (...), Ob. cit.

<sup>&</sup>lt;sup>91</sup> TRIMBLE, 2009, *Cross-Border Injunctions (...)*, Ob. cit.

<sup>&</sup>lt;sup>92</sup> UNITED STATES OF AMERICA. Eastern District of Texas, Marshall, "*O2 Micro International Ltd. v. Sumida Co.*", 2:03-CV-07, April 12th, 2006. Available at: https://casetext.com/case/o2-micro-international-limited-v-sumida-corporation?. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>93</sup> UNITED STATES OF AMERICA. Eastern District of Texas, Marshall, "*O2 Micro International Ltd. v. Beyond Innovation Technology Co.*", 2:04-CV-32. April 22nd, 2009. Available at: https://casetext.com/case/o2-micro-international-v-beyond-innovation-technology. Accessed on: July 4th, 2024.

<sup>94</sup> UNITED STATES OF AMERICA, 2009, O2 Micro (...), Ob. cit.

These injunctions were aimed at the defendant's infringing activities in the US, not seeking to enjoin commercialisation of such products outside of the United States. The language used in the Sumida case by former judge T. John Ward of the Eastern District of Texas is aligned with this notion: "These terms preserve [Sumida]'s ability to sell its products for use outside the United States while placing potential purchasers and importers on notice that the importation or sale of such products within the United States is prohibited".95

Although surely aiming to protect the plaintiff against infringement happening in the US, the measure ordered by the court targets an action made solely on foreign soil: the labelling of a product made by a Taiwanese company for sale worldwide. In this sense, the court order may have been issued by a US District Court, but it would need to be carried out in a foreign country and, therefore, would need foreign enforcement to be brought into effect.

While there have been some scholars who have suggested an 'enforcement by proximity' in cases where one cannot enforce an injunction abroad as it was ordered by a national court, 96 this doctrine is still reliant on a national court's adoption of the foreign ruling. In conclusion, although there is an active scholarly discussion on cross-border enforcement of patent judgements, as of this moment there is still no uniform and cohesive answer to the transnational injunction dilemma.

#### 3.2. The possibility of preliminary injunction measures

One of the principles guiding private international law dictates that, before a decision may be recognised or enforced abroad, it must be final.<sup>97</sup> The concept of finality, however, is not clear beyond a shadow of a doubt. In Brazil, for example, the court vested with jurisdiction shall not recognise or enforce a foreign decision unless it has already been made into res judicata.<sup>98</sup> The United Kingdom, on the other hand, allows the High Court to provide interim relief in proceedings commenced outside of its jurisdiction according to the rules enshrined in Section 25 of the Civil Jurisdiction and Judgments Act of 1982.<sup>99</sup>

Patent litigation, in turn, often presents very high stakes to the parties involved - particularly when dealing with startup tech companies<sup>100</sup>, research universities (including public entities)<sup>101</sup>, as well as smaller patent-dependant businesses. In this context, such companies need to resolve disputes quickly and sometimes resort to interim relief to prevent further damages. Regardless, when such measures need to be applied in a cross-border context, finality may prove difficult to overcome.

While domestically, national court orders are effective immediately upon issue, foreign enforcement may depend on a non-appealable verdict. What this means for a given plaintiff is that foreign preliminary injunctions are, in most cases,

<sup>95</sup> UNITED STATES OF AMERICA, 2006, O2 Micro (...), Ob. cit.

<sup>&</sup>lt;sup>96</sup> OESTREICHER, Y. Recognition and Enforcement of Foreign Intellectual Property Judgments: Analysis and Guidelines for a New International Convention, Doctorate Thesis, Duke University School of Law, April 2004.

<sup>&</sup>lt;sup>97</sup> TRIMBLE, 2009, Cross-Border Injunctions (...), Ob. cit.

<sup>&</sup>lt;sup>98</sup> BRAZIL. Superior Tribunal de Justiça. *"Emenda Regimental n. 18 de 17 de dezembro de 2014"*, Diário da Justiça Eletrônico do STJ, Brasília, December 19th, 2014. Available at: https://bdjur.stj.jus.br/jspui/handle/2011/83924. Accessed on: July 4th, 2024.

UNITED KINGDOM. "Civil Jurisdiction and Judgments Act 1982", Legislation.gov,
 Westminster,
 Available
 at:

https://www.legislation.gov.uk/ukpga/1982/27/section/25#commentary-key-

<sup>9</sup>a33dfd6a7c16ffe4d1be36c6d58d943. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>100</sup> DE WILTON, A. "Patent Value: A Business Perspective for Technology Startups", *Technology Innovation Management Review*, V. 5, no 12, 2011, p. 5–11.

<sup>&</sup>lt;sup>101</sup> DIVINO, S. "Responsabilidade do Funcionário Público pela valoração de Tecnologia destinada à Transferência das Instituições Científica, Tecnológica e de Inovação (ICT's) para o setor privado", Cadernos de Dereito Actual, issue 24, June 2024, p. 278–291.

non-exportable. In this sense, a separate plea for interim relief must, necessarily, be filed in the jurisdiction in which the injunction shall be enforced.

In the spirit of harmonising interim relief procedures, the TRIPS Agreement dedicates Part III, Section 3 to regulate provisional measures regarding IPR. The procedures enshrined in Article 50, paragraphs 1 and 2 specifically, mention that such measures may be adopted even inaudita altera parte, where appropriate. Paragraph 6, on the other hand, provides rules regarding situations where a defendant may request the competent authority to revoke provisional measures if proceedings to decide the merits are not initiated in a timely manner.

The rules brought forth by TRIPS provide a pathway to quick and decisive action, provided that there is evidence of imminent acts of infringement.  $^{105}$  Regardless, in the years following the Uruguay Round and the TRIPS Agreement, there have been scholars who questioned if national courts would be obliged to exercise this power and how the 'irreparable harm' test would be applied in an international context.  $^{106}$ 

Article 50 has seen application in some courts around the world, most notably, the European Court of Justice (ECJ) was asked to provide a clear definition of what constitutes a 'provisional measure' under TRIPS rules.<sup>107</sup> Still, even though TRIPS requires this pathway to be available, enforcement of provisional measures are still subject to the evaluation of national courts and, therefore, conditions for imposing these measures may vary considerably. For an instance, authors have noted that France seldom grants such provisional injunctions.<sup>108</sup>

#### 3.3. The possibility of preliminary injunction measures

As indicated prior, enforcing foreign decisions is not a simple matter, notably when dealing with injunctions. In this vein, some authors have noted that many courts are more willing to award money damages instead of orders to enjoin from infringing behaviour in cross-border issues.<sup>109</sup>

One of the reasons often mentioned to justify the plight of cross-border injunctions is that these are commonly perceived as intrusive to a nation's sovereignty and may affect the behaviour of a company outside of the infringed jurisdiction. Using the Beyond case for illustrative purposes, the order given by a US Court would significantly intervene in a Taiwanese company's behaviour outside of the United States. Should this exterior meddling cause the Taiwanese company to cease commercial activities, this would mean, for instance, a drop in tax revenue coming from the injuncted company. 111

<sup>&</sup>lt;sup>102</sup> WTO, 1994, *Annex 1C (...)*, Ob. cit., part III, s. 3.

<sup>&</sup>lt;sup>103</sup> WTO, 1994, *Annex 1C (...)*, Ob. cit.

<sup>&</sup>lt;sup>104</sup> WTO, 1994, *Annex 1C (...)*, Ob. cit., part III, s. 3, article 50.6.

<sup>&</sup>lt;sup>105</sup> WTO. "TRIPS Agreement – Article 50 (Jurisprudence)", World Trade Organization, December 2021, p. 50. Available at: https://www.wto.org/english/res\_e/publications\_e/ai17\_e/trips\_art50\_jur.pdf. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>106</sup> REICHMAN, J. "Enforcing the Enforcement Procedures of the TRIPS Agreement", *Virginia Journal of International Law*, V. 37, no 2, January 1996, p. 335–356.

<sup>&</sup>lt;sup>107</sup> EUROPEAN UNION. Court of Justice of the European Union, "Hermès International v. FHT Marketing Choice BV", C-53/96, June 16th, 1998. Available at: https://curia.europa.eu/juris/liste.jsf?num=C-53/96. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>108</sup> HEATH, C.; COTTER, T. F. "Comparative Overview and the TRIPS Enforcement Provisions", in (HEATH, C; PETIT, L. ed.) *Patent Enforcement Worldwide: A Survey of 15 Countries: Writings in Honour of Dieter Stauder.* V. 23. 2nd ed. Ed. Hart Publishing, Oxford, 2005.

<sup>109</sup> OESTREICHER, 2004, Recognition and Enforcement (...), Ob. cit.

<sup>&</sup>lt;sup>110</sup> TRIMBLE, 2009, *Cross-Border Injunctions (...)*, Ob. cit.

<sup>&</sup>lt;sup>111</sup> TRIMBLE, 2009, *Cross-Border Injunctions (...)*, Ob. cit.

When weighing the pros and cons of recognising and enforcing a foreignissued injunction, a state should, ideally, also take into account the principle of comity<sup>112</sup> and how its decision to do so will impact its position on the world stage. Canada, for instance, had a doctrine of only enforcing foreign money judgements as a way to limit the scope of foreign enforcement.<sup>113</sup> After the *Pro Swing Inc. v. Elta Golf Inc.*<sup>114</sup> case (hereinafter "Pro Swing"), though, the Supreme Court of Canada began allowing the execution of foreign non-monetary rulings.<sup>115</sup>

Even then, there has been substantial debate on the matter. Particularly in regards to contempt of court orders, which are sometimes interpreted to be criminal in nature. In this regard, in Pro Swing, Justice Deschamps noted that "The contempt order is quasi-criminal in nature, and a Canadian court will not enforce a penal order, either directly or indirectly"<sup>116</sup> and elaborated further by noting that "The gravity of a contempt order in Canada is underscored by the criminal law protections afforded to the person against whom such an order is sought and by the sanction that person faces, which could include imprisonment".<sup>117</sup>

TRIPS rules also allow for magistrates to issue judicial orders pertaining to goods retained in customs with the aim of protecting domestic IPR.  $^{118}$  However, if injunctive orders are deemed unacceptable by a given national judiciary, Article 44(2) also gives member-states enough leeway to substitute injunctions for measures compatible with internal legislation - such as declaratory judgements or adequate compensation.  $^{119}$ 

In summary, the enforcement of a national patent may be able to produce extraterritorial effects if the national judgement is recognised and enforced by a foreign competent court. Nevertheless, when "exporting" the national sentence, the injunction first imposed may be changed to correspond with the foreign country's internal judicial standards. Furthermore, in most cases, preliminary injunctions granted by a national court are not enforceable externally, as they lack, by definition, the "finality" requirement. Lastly, when dealing with contempt of court, some jurisdictions, as was the case in Pro Swing, may decline to enforce a contempt order by citing concerns of the "quasi-criminal nature" of such measures.

#### 4. Who is to blame when a violation occurs?

After discussing the pathways made available to seek international remedies in the patent context, it is now important to consider the liability of the infringing parties. The e-commerce framework allows for many business settings to take place, as mentioned in the prior sections. <sup>120</sup> For the purposes of this analysis, the setting in which focus will be applied is the B2C retail model.

The reason for this choice is in part due to the novelty of such a business model in the transnational context, whereas other models were more common in transnational frameworks (particularly B2B), the retail model is still quite recent in the cross-border stage, as discussed in Section I.

<sup>&</sup>lt;sup>112</sup> LEHMAN; PHELPS, 2004, West's Encyclopedia (...), Ob. cit.

PITEL, S. G. A. "Enforcement of Foreign Non-Monetary Judgments in Canada (And Beyond)", *Journal of Private International Law*, V. 3, no 2, October 2007, p. 241–260.

<sup>&</sup>lt;sup>114</sup> CANADA. Supreme Court of Canada, "*Pro Swing Inc. v. Elta Golf Inc.*", 2 SCR 612 30529, November 17th, 2006. Available at: https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/2326/index.do. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>115</sup> CANADA, 2006, *Pro Swing (...)*, Ob. cit.

<sup>&</sup>lt;sup>116</sup> CANADA, 2006, *Pro Swing (...)*, Ob. cit.

<sup>&</sup>lt;sup>117</sup> CANADA, 2006, *Pro Swing (...)*, Ob. cit.

<sup>&</sup>lt;sup>118</sup> WTO, 1994, *Annex 1C (...)*, Ob. cit., part III, s. 3, article 44.

<sup>&</sup>lt;sup>119</sup> WTO, 1994, *Annex 1C (...)*, Ob. cit., part III, s. 3, article 44.

<sup>&</sup>lt;sup>120</sup> e.g., B2B, B2C, C2B or C2C.

Even though it has become relatively widespread and seen substantial growth in recent years, <sup>121</sup> B2C e-commerce still poses some challenges logistically, especially for SMEs. In this scenario, domestic SMEs may refrain from engaging in cross-border online markets due to uncertainties and high barriers to entry (as discussed supra), particularly in what concerns different laws, methods of payment, marketing strategies and logistics. <sup>122</sup>

Thus, this section will aim at addressing the distinctive traits which make the trend towards widespread adoption of B2C transnational e-commerce particularly troublesome for patent owners and what remedies may be envisaged to safeguard the legitimate interests of innovators in this scenario.

# 4.1. The chain of events in importation: in search of a model for liability attribution

It is unknown whether there is a patent system in which the duty to patrol<sup>123</sup> one's patents does not fall solely upon the patent holder and authorised licensees.<sup>124</sup> In this sense, it is far simpler for a patent holder to take notice of a large quantity of infringing products being offered for sale in an internal market by a domestic competitor who bought such items abroad (as happens in the B2B model) than recognising small shipments entering the market individually and directly to consumers.

In order to illustrate the process in which a given product arrives at a foreign country's ports of entrance, it is possible to illuminate the following steps as common in international commercial activities: (A) Product is manufactured; (B) Product is cleared for export; (C) Product is shipped; (D) Product arrives in customs; (E) Product is delivered to importer; (E) Product is delivered to consumer.

Under B2B, in general, products are screened by a customs officer in Point D and are offered for sale after arrival upon Point E, after which, the product is passed along to the final consumer (Point F). In this hypothetical chain of events, infringement (as it relates to importation) normally takes place when the product passes from Point D to Point E.<sup>125</sup> Additionally, if there is no retention of goods in customs, the patent holder should conventionally only gain knowledge of potential infringement when the product is offered for sale.

With B2C, however, there is a considerable suppression of roles in the chain of events. There is no longer a distinction between an importer and a consumer and, therefore, it becomes clear that points E and F are merged. In this perspective, less-than-optimal circumstances for liability attribution are observed.

<sup>122</sup> DING, F.; HUO, J.; CAMPOS, J. K. "The Development of Cross Border E-commerce", *Advances in Economics, Business and Management Research*, V. 37, September 2017, p. 487–500.

<sup>&</sup>lt;sup>121</sup> MA; CHAI; ZHANG, 2018, Rise of Cross-border (...), Ob. cit.

<sup>&</sup>lt;sup>123</sup> For a more in-depth look into the duty to patrol a patent, see: RABINOWITZ, A. "Keep Your Eye on Your Ball: Patent Holders' Evolving Duty to Patrol the Marketplace for Infringement", *Northwestern Journal of Technology and Intellectual Property*, V. 5, no 2, January 2007, p. 192.

<sup>&</sup>lt;sup>124</sup> This statement is made by taking into account the known patent law in the United States of America and Brazil. In this context, seeing a patent as a property title, one may find it difficult to envision parties other than the patent holder and duly authorised licensees as legitimate claimants to seek out the enforcement of such IPR.

<sup>&</sup>lt;sup>125</sup> This statement is made by taking into account the provisions in 35 U.S.C. §271(g) (for the United States), and article 42 of the "Lei 9.279, de 14 de maio de 1996" (for Brazil).

#### 4.2. Importation rules and consumer liability

In cases pertaining to importation, it is imperative to understand who is responsible for each step of the logistics chain. This division of attributions is normally done through agreements, and the Incoterms are of great value to determine how such arrangements are made. FOB, for instance, determines vendor responsibility until the cargo is packed onto the ship<sup>126</sup> (intermediary point between Points B and C). An even stricter approach is observed in FCA, where responsibility passes to the buyer as soon as the goods are cleared for export and made available at a predetermined location<sup>127</sup> (a stage much closer to Point B).

In both FOB and FCA, the vendor has not taken any actions in foreign countries, nor is it responsible for any further steps in the logistics chain apart from the ones that were already taken domestically. Thus, both of these agreements allow for a much more 'hands-off' approach by the seller, who has no obligation to deal with other countries' customs, taxation, or other bureaucracies applicable.

DAP, however, offers a different approach. Whereas in FOB and FCA the merchant has no responsibility to take action in foreign countries, the DAP arrangement still calls for that to happen. The DAP, in this respect, further places the responsibility of delivery upon a foreign merchant, but not the duty to pay the taxes or other fees associated with importation - this attribution remains with the buyer. For illustrative purposes, a DAP arrangement would place the responsibility of delivery for a seller in Point E and the duty to bear importation costs would shift at Point D.<sup>128</sup> DDP agreements go even further and require the seller both to deliver the wares to a named place by the buyer and also shoulder the costs of customs clearance and taxes.<sup>129</sup> In this instance, the stage at which responsibilities shift is solely Point E.

From an importation perspective, then, FOB and FCA offer significantly less involvement in the operation for a potential vendor, with most of the importing procedures being done by the consumer. In DAP and DDP, however, significant steps in a foreign country are still taken by the seller (albeit at the mandate of the buyer), and, therefore, acts of infringement could be construed to implicate the seller as a defendant in possible litigation.

Nevertheless, indicting a foreign vendor as an importer would place a heavy argumentative burden on a potential plaintiff. The main reason for this being that, even though definitions on what constitutes an importer may shift from country to country, an importer is generally perceived as the person who seeks out to bring a product into a given country. The legal definition for 'importer', as pertaining to United States law, is found in Chapter 19 of the Code of Federal Regulations (C.F.R.) and generally seems to corroborate with the regular definition, although interpretation may vary according to the facts presented in a given case.

<sup>&</sup>lt;sup>126</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, *Incoterms*® (...), Ob. cit.

<sup>&</sup>lt;sup>127</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, *Incoterms*® (...), Ob. cit.

<sup>&</sup>lt;sup>128</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, *Incoterms*® (...), Ob. cit.

<sup>&</sup>lt;sup>129</sup> INTERNATIONAL CHAMBER OF COMMERCE, 2019, *Incoterms*® (...), Ob. cit.

<sup>&</sup>lt;sup>130</sup> MERRIAM-WEBSTER. "Definition of Importer", Merriam-Webster, 2023. Available at: https://www.merriam-webster.com/dictionary/importer. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>131</sup> UNITED STATES OF AMERICA. "Code of Federal Regulations", Legal Information Institute (LII), Ithaca, 2016. Available at: https://www.law.cornell.edu/cfr/text/19/101.1. Accessed on: July 4th, 2024. The definition presented reads as such: "Importer" means the person primarily liable for the payment of any duties on the merchandise, or an authorized agent acting on his behalf. The importer may be: (1) The consignee, or (2) The importer of record, or (3) The actual owner of the merchandise, if an actual owner's declaration and superseding bond has been filed in accordance with § 141.20 of this chapter, or (4) The transferee of the merchandise, if the right to withdraw merchandise in a bonded warehouse has been transferred in accordance with subpart C of part 144 of this chapter.

This could lead one to believe that, in the strictest of definitions, infringement issues in cross-border e-commerce are generally attributable to the consumer. After all, it is the consumer who carries out the action contained in most statutes of "importing [a product] into" the infringed country. However, when one seeks case law in the matter, it is difficult, though not impossible, 132 to find consumers as defendants in an infringement case.

In the Brazilian context, authors Barbosa and Barbosa<sup>133</sup> specifically cite the impossibility of consumers being held liable for patent infringement under Brazilian Law. This is due to the lack of "commercial intent" in the actions of the importer. This interpretation is, indeed, consistent with the strict language of art. 42 of the Brazilian Industrial Property Law (Public Law no. 9.279/96), which states that a patent grants to its owner "the right to impede a third-party, without the owner's consent, to produce, use, offer for sale, sell or import with these purposes [...]". The "import with these purposes" snippet does call for the act of importation to be intentionally linked to the prior other acts (e.g. "production", "use", "offer for sale" and "sale") for it to constitute an act of infringement.

Nevertheless, it is important to call attention to practical problems stemming from this interpretation. If the consumer's act of importation is de facto legal, the only recourse left for innovators would be to file action against the seller – an alternative which involves all of the inefficiencies discussed in the previous sections.

While the prospect of holding individual consumers liable for patent infringement may raise valid concerns even in the public policy setting, it is important to ponder whether the Law should hold liable consumers who import patented products for uses that are commercial in nature.<sup>134</sup>

### 4.3. Liability of the online seller

As mentioned supra, in the context of a violation of the 'importation rights', <sup>135</sup> it is simpler to attribute the role of 'importer' to the domestic buyer. Nevertheless, in case law for patent infringement, it is less common to include consumers as defendants - and when consumers are among the defendants, plaintiffs are, in some cases, patent trolls.

In Pro Swing, for example, the object of infringement was a set of golf clubs sold in Canada by Elta. Even after Elta was previously enjoined from selling such clubs in the USA, an investigator hired by the plaintiff was able to buy a set of clubs and have them delivered to an address in Ohio. 136 Therefore, the action which the plaintiff sought to prohibit, was not the importation per se of the clubs into the US, but an offer to sell those clubs to consumers in the United States.

<sup>&</sup>lt;sup>132</sup> For examples of when consumers have been defendants in patent infringement cases, see: NAZER, D. "Actually, Mr. Waxman, Consumers Are Sued For Patent Infringement All the Time", Electronic Frontier Foundation, April 30th, 2014. Available at: https://www.eff.org/deeplinks/2014/04/actually-mr-waxman-consumers-are-sued-patent-infringement-all-time. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>133</sup> BARBOSA, P. M. N.; BARBOSA, D. B. *Código da Propriedade Industrial Conforme os Tribunais. Patentes. 2018*, v.1. 1st ed. Ed. Lumen Juris, Rio de Janeiro, 2018.

 $<sup>^{134}</sup>$  e.g.: one could argue that a Brazilian food company which imports mobile phones with patented components from China for their local commercial representatives should be held liable for patent infringement.

<sup>&</sup>lt;sup>135</sup> The expression 'importation right' refers to the exclusive right of importation as enshrined in 35 U.S.C. §271(g) (for the United States), article 42 of the Brazilian Industrial Property Law (Public Law no. 9.279/96, for Brazil), and similar rights in other jurisdictions.

<sup>&</sup>lt;sup>136</sup> CANADA, 2006, *Pro Swing (...)*, Ob. cit.

Similarities can also be found in the decision by the German District Court of Düsseldorf (Landgericht Düsseldorf) in *Sohlen für Sportschuhe*.<sup>137</sup> In this case, the plaintiff was a German patent holder who claimed a website from the USA offered to sell shoes with a multi-layered sole which infringed upon the domestic patent.<sup>138</sup> The defendant alleged that it did not directly offer the product to German consumers, despite that, the court noted that there were German distributors listed on the US website and the plaintiff demonstrated that an associate did in fact order and receive an infringing product through the website.

In this sense, there are two acts of infringement potentially taking place in such cross-border e-commerce: (i) direct local infringement from a consumer actively importing a patented product into the protected country, and (ii) direct transnational infringement from a manufacturer offering to sell a patented product to the end-consumer.

Case law in the United States has already made clear that acts made abroad can constitute an act of infringement. Nevertheless, there are some distinctions to be made on the limits of such actions. In Crystal Semiconductor Corp. v. Tritech Microelectronics International, Inc., the Court of Appeals for the Federal Circuit held a judgment for infringement as it was considered that there was enough evidence to demonstrate the existence of coordination by the foreign defendant (who designed and manufactured a computer chip) and the importer, who subsequently imported and distributed the chip into the United States.

The same cannot be said of Shockley v. Arcan, Inc., <sup>143</sup> in which the foreign entity was cleared of any infringement claims, as the Chinese company merely sold a product to an US retailer who subsequently imported the products into the United States. Thus, the Chinese company could not be held liable for the act of infringement, since there was no offer to sell or any other attempt at a coordination in which the final aim would be an act of infringement against a United States Patent.

With this perspective in mind, even though consumers may be the ones infringing upon importation rights, the most efficient stance (in terms of discouraging infringing behaviour) may be to target legal action against those who offer to sell patented products instead of individual consumers.

#### 5. Conclusion

In conclusion, cross-border e-commerce presents significant risks and opportunities for national markets. Some of the countries traditionally active in e-commerce are already implementing statutes seeking to regulate this market and its transnational activities. In this context, the number of patented products being

<sup>&</sup>lt;sup>137</sup> GERMANY. District Court of Düsseldorf, "Sohlen für Sportschuhe", 4a O 33/01, February 5th, 2002. Available at: https://www3.hhu.de/duesseldorfer-archiv/?p=1115. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>138</sup> For an in-depth analysis of this case, see: TRIMBLE, 2009, *Cross-Border Injunctions* (...), Ob. cit.

<sup>139</sup> e.g., the provisions enshrined in 35 U.S.C. §271(a) or (g) (for the United States).

<sup>&</sup>lt;sup>140</sup> e.g., the provisions enshrined in 35 U.S.C. §271(b) or (c) (for the United States).

 $<sup>^{141}</sup>$  PETERSEN, T. "U.S. Infringement Liability for Foreign Sellers of Infringing Products", *Duke Law & Technology Review*, V. 2,  $n^{o}$  1, December 2003, p. 1–8.

<sup>&</sup>lt;sup>142</sup> UNITED STATES OF AMERICA. United States Court of Appeals for the Federal Circuit, " *Crystal Semiconductor Corp. v. Tritech Microelectronics International, Inc.*", 246 F.3d 1336 (Fed. Cir. 2001), March 7th, 2001. Available at: https://law.resource.org/pub/us/case/reporter/F3/246/246.F3d.1336.-1559.00-1006.99-1558.html. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>143</sup> UNITED STATES OF AMERICA. United States Court of Appeals for the Federal Circuit, "Shockley v. Arcan, Inc.", 248 F.3d 1349 (Fed. Cir. 2001), July 2nd, 2001. Available at: https://casetext.com/case/shockley-v-arcan-inc. Accessed on: July 4th, 2024.

commercialised is expected to grow and give rise to more litigation targeted at activities abroad.

The present instruments of intellectual property protection are, as discussed in the prior sections, mainly focused on national protection. As established in Section II of this article, the effectiveness and reach of national protection is increasingly challenged by international commerce and the need to enforce domestic decisions abroad.

Even though, in the context of cross-border e-commerce, large retail companies are taking steps to enforce intellectual property rights, these movements do not yet provide a substantive or comprehensive solution to the problem of infringement.

In order to bolster the effectiveness of protection, national patent systems may also look to other fields of intellectual property law in search of inspiration for patent safeguarding. One could argue that an analogy with the safe harbour provisions of copyright law could bring e-commerce platforms to be more cooperative. The same could be said of notice and takedown systems.

Nevertheless, there are authors who argue that substantial progress in international coordination for patent law judgements can only be achieved through a comprehensive international convention on the recognition and enforcement of foreign judgements in intellectual property matters.<sup>145</sup>

International treaties have, indeed, been the backbone through which intellectual property harmonization was achieved. Efforts coming from the field of public international law have, thus, played a large role in building the modern notions which permeate the field of intellectual property – notably patents. Hence, considering the WTO's interests in regulating e-commerce and the need to safeguard patent holders' rights against cross-border infringement, one could argue that the next significant step to promote international progress and innovation is the drafting and adoption of a treaty to promote the recognition and enforcement of foreign judgements for a wide range of intellectual property rights. 146

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<sup>&</sup>lt;sup>144</sup> For an example, see: ALIBABA. "Alibaba Group - Intellectual Property Protection Platform (IPP platform)", 2023. Available at: https://ipp.alibabagroup.com/index.htm. Accessed on: July 4th, 2024.

<sup>&</sup>lt;sup>145</sup> OESTREICHER, 2004, Recognition and Enforcement (...), Ob. cit.

<sup>&</sup>lt;sup>146</sup> OESTREICHER, 2004, Recognition and Enforcement (...), Ob. cit.

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